

SEARCH REQUEST FORM

Requestor's Name: _____ Serial Number: _____
 Date: _____ Phone: _____ Art Unit: _____

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

STAFF USE ONLY

Date completed: <u>03-28-03</u>	Search Site	Vendors
Searcher: <u>Beverly e 4959</u>	<u>STIC</u>	<u>IG Suite</u>
Terminal time: <u>24</u>	<u>CM-1</u>	<u>✓</u> STN
Elapsed time: _____	<u>Pre-S</u>	<u>Dialog</u>
CPU time: _____	Type of Search	<u>APS</u>
Total time: <u>27</u>	<u>N.A. Sequence</u>	<u>Geninfo</u>
Number of Searches: <u>2</u>	<u>A.A. Sequence</u>	<u>SDC</u>
Number of Databases: _____	<u>Structure</u>	<u>DARC/Questel</u>
	<u>Bibliographic</u>	<u>✓</u> Other <u>CGN</u>

09/756690

L1 FILE 'REGISTRY' ENTERED AT 14:26:15 ON 28 MAR 2003
13 S HSDGTFTSDL SKQMEEEAVRLFIEWLKNGGPSSG/SQSP

L1 ANSWER 1 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 474444-80-9 REGISTRY
CN L-Serine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 4: PN: WO02085406 SEQID: 7 unclaimed protein
CI MAN
SQL 39

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:346934

L1 ANSWER 2 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 437134-20-8 REGISTRY
CN 8: PN: WO0246227 SEQID: 9 unclaimed protein (9CI) (CA INDEX NAME)
CI MAN
SQL 39

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:28591

L1 ANSWER 3 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 421042-94-6 REGISTRY
CN L-Serine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2: PN: WO0234285 SEQID: 7 unclaimed protein
CI MAN
SQL 39

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

09/756690

REFERENCE 1: 136:350560

L1 ANSWER 4 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 309729-82-6 REGISTRY
CN Exendin 3 (Heloderma horridum), 39a-[N6-[21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,10,19-trioxo-3,6,12,15-tetraoxa-9,18-diazaheneicos-1-yl]-L-lysine]-, pentakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 38: PN: WO0069911 PAGE: 71 claimed sequence
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVER LFIEWLKNNG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVER LFIEWLKNNG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVER LFIEWLKNNG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:13338

L1 ANSWER 5 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 309729-80-4 REGISTRY
CN Exendin 3 (Heloderma horridum), 39a-[N6-[21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,10,19-trioxo-3,6,12,15-tetraoxa-9,18-diazaheneicos-1-yl]-L-lysine]- (9CI) (CA INDEX NAME)

CI COM, MAN
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVER LFIEWLKNNG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:13338

L1 ANSWER 6 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 309257-17-8 REGISTRY
CN 194: PN: WO0069900 SEQID: 373 unclaimed protein (9CI) (CA INDEX NAME)

CI MAN
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVER LFIEWLKNNG PSSGAPPPSK
=====

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HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:21425

L1 ANSWER 7 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 308806-01-1 REGISTRY
CN L-Lysine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-lysyl-L-asparaginyglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl-L-seryl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 19: PN: WO0069911 SEQID: 19 claimed protein
CI MAN
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:13338

L1 ANSWER 8 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 308249-28-7 REGISTRY
CN Exendin 3 (Heloderma horridum), 39a-[N6-[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,7,13-trioxo-3,9-dioxo-6,12-diazapentadec-1-yl]-L-lysineamide]-, pentakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:21425

L1 ANSWER 9 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 308249-20-9 REGISTRY

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CN Exendin 3 (Heloderma horridum), 39a-[N6-[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,7,13-trioxo-3,9-dioxo-6,12-diazapentadec-1-yl]-L-lysineamide]- (9CI) (CA INDEX NAME)
CI COM, MAN
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====
HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L1 ANSWER 10 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 308249-19-6 REGISTRY
CN Exendin 3 (Heloderma horridum), 39a-[N6-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]-L-lysineamide]-, pentakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 35: PN: WO0069911 PAGE: 68 claimed sequence
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====
HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====
HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====
HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:21425

REFERENCE 2: 134:13338

L1 ANSWER 11 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 308245-55-8 REGISTRY
CN Exendin 3 (Heloderma horridum), 39a-[N6-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]-L-lysineamide]- (9CI) (CA INDEX NAME)
CI COM, MAN
SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK
=====
HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:13338

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L1 ANSWER 12 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 306277-48-5 REGISTRY
CN L-Serine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-L-lysyl-L-glutamyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-lysyl-L-asparaginyglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11: PN: WO0069911 SEQID: 11 claimed protein
CN 185: PN: WO0069900 SEQID: 364 unclaimed protein
CN 1: PN: WO0151078 SEQID: 1 unclaimed protein
CN 2: PN: WO0066138 PAGE: 13 unclaimed protein
CN 3: PN: US6284725 SEQID: 7 unclaimed protein
CN 3: PN: WO0066142 TABLE: 1 unclaimed protein
CN 5: PN: WO0077039 TABLE: 1 unclaimed protein
CI MAN
SQL 39

SEQ 1 HSDGTFSTDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
===== ===== =====
HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:205920
REFERENCE 2: 135:132445
REFERENCE 3: 134:51920
REFERENCE 4: 134:21425
REFERENCE 5: 134:13338
REFERENCE 6: 133:345167
REFERENCE 7: 133:345166

L1 ANSWER 13 OF 13 REGISTRY COPYRIGHT 2003 ACS
RN 130357-25-4 REGISTRY
CN Exendin 3 (Heloderma horridum) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11: PN: WO0041546 FIGURE: 1 claimed protein
CN 1: PN: WO0066629 FIGURE: 1 unclaimed sequence
CN 36: PN: WO0069911 PAGE: 69 claimed sequence
CN Exendin-3 (Heloderma horridum)
CN L-Serinamide, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-L-lysyl-L-glutamyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-lysyl-L-asparaginyglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl-
CI MAN
SQL 39

09/756690

SEQ 1 HSDGTFTSDL SKQMEEEA VR LFIEWLKN GG PSSGAPPPS
=====

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:88643
REFERENCE 2: 135:376777
REFERENCE 3: 134:37033
REFERENCE 4: 134:13338
REFERENCE 5: 133:359242
REFERENCE 6: 133:135612
REFERENCE 7: 133:129880
REFERENCE 8: 128:192936
REFERENCE 9: 123:74913
REFERENCE 10: 121:222490

FILE 'HCAPLUS' ENTERED AT 14:27:42 ON 28 MAR 2003
L2 20 S L1

L2 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:832649 HCAPLUS
DOCUMENT NUMBER: 137:346934
TITLE: Methods for treating conditions associated with
insulin resistance by administering a GLP-1
compound
INVENTOR(S): Holst, Jens Juul; Olsen, Mette Zander; Hathaway,
David R.
PATENT ASSIGNEE(S): Restoragen, Inc., USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085406	A1	20021031	WO 2002-US13088	20020424
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,			

Searcher : Shears 308-4994

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SN, TD, TG
PRIORITY APPLN. INFO.: US 2001-285699P P 20010424
AB The present invention relates to methods and compns. for treating insulin-assocd. conditions comprising administering a glucagon-like peptide-1 (GLP-1) compd. to subjects suffering therefrom. The insulin resistance-assocd. condition of the invention is type-2 pre-diabetes, atherosclerotic cardiovascular disease, drug-induced insulin resistance, congestive heart failure, diminished exercise capacity of skeletal muscle, and left ventricular dysfunction with cardiac metabolic myopathy or diminished exercise capacity of skeletal muscle; with the proviso that said congestive heart failure is not assocd. with toxic hypervolemia.

IT 474444-80-9

RL: PRP (Properties)

(unclaimed protein sequence; methods for treating conditions assocd. with insulin resistance by administering a GLP-1 compd.)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:449715 HCAPLUS

DOCUMENT NUMBER: 137:28591

TITLE: Preparation of GLP-1 fusion proteins for use in

treating diabetes mellitus and other conditions

INVENTOR(S): Glaesner, Wolfgang; Micanovic, Radmilla;

Tschang, Sheng-Hung Rainbow

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 200 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046227	A2	20020613	WO 2001-US43165	20011129
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, FL, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

AU 2002026897 A5 20020618 AU 2002-26897 20011129

PRIORITY APPLN. INFO.: US 2000-251954P P 20001207

WO 2001-US43165 W 20011129

OTHER SOURCE(S): MARPAT 137:28591

AB The present invention relates to glucagon-like peptide-1 compds. fused to proteins that have the effect of extending the in vivo half-life of the peptides. The heterologous fusion proteins of the invention comprise a GLP-1 compd. fused to human albumin, a human albumin analog or fragment, the Fc portion of an Ig, or an analog or

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fragment of the Fc portion of an Ig. These fusion proteins can be used to treat non-insulin dependent diabetes mellitus as well as a variety of other conditions. Pharmaceutical formulations contg. the fusion proteins and polynucleotides encoding the proteins are also claimed.

IT 437134-20-8

RL: PRP (Properties)

(unclaimed protein sequence; prepn. of GLP-1 fusion proteins for use in treating diabetes mellitus and other conditions)

L2 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:361520 HCAPLUS

DOCUMENT NUMBER: 137:88643

TITLE: Endoproteolysis by isolated membrane peptidases reveal metabolic stability of glucagon-like peptide-1 analogs, exendins-3 and -4

AUTHOR(S): Thum, A.; Hupe-Sodmann, K.; Goke, R.; Voigt, K.; Goke, B.; McGregor, G. P.

CORPORATE SOURCE: Institute of Physiology, Philipps-University, Marburg, D-35037, Germany

SOURCE: Experimental and Clinical Endocrinology & Diabetes (2002), 110(3), 113-118
CODEN: ECEDFQ; ISSN: 0947-7349

PUBLISHER: Johann Ambrosius Barth

DOCUMENT TYPE: Journal

LANGUAGE: English

AB These in vitro studies aimed to characterize the pattern and the kinetics of endoproteolysis of the insulinotropic hormone glucagon-like peptide-1 (GLP-1) and related peptides by native ectopeptidases. Peptides were incubated with isolated rat or pig kidney brush-border microvilli membranes, which are a rich source of the ectopeptidases that are responsible for the post-secretory metab. of peptide hormones. The proteolytic products were sepd. by reversed-phase HPLC column chromatog. and characterized by mol. mass and primary structure. The relative importance of specific peptidases was established by measuring the effects of specific peptidase inhibitors on the kinetics of proteolysis. Dipeptidyl-peptidase-IV was found to be rate-limiting in the endoproteolysis of GLP-1. GLP-1 homologs, exendins-3 and -4, exhibited exceptional stability in the presence of isolated kidney microvilli membranes. Our finding that exendin-4 is several orders of magnitude more stable than GLP-1 and Ser-8-GLP-1 is esp. noteworthy given this peptide's widely reported insulinotropic potency.

IT 130357-25-4, Exendin 3 (Heloderma horridum)

RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics);

BIOL (Biological study)

(endoproteolysis by isolated membrane peptidases reveal metabolic stability of glucagon-like peptide-1 analogs and exendin-3 and -4)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:332051 HCAPLUS

DOCUMENT NUMBER: 136:350560

TITLE: Treatment of hibernating myocardium and diabetic

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cardiomyopathy with a GLP-1 peptide
INVENTOR(S): Ehlers, Mario
PATENT ASSIGNEE(S): Coolidge, Thomas R., USA
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034285	A2	20020502	WO 2001-US32559	20011022
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002014618	A5	20020506	AU 2002-14618	20011022
US 2002146405	A1	20021010	US 2001-982978	20011022
PRIORITY APPLN. INFO.:				
US 2000-241834P P 20001020				
US 2000-242139P P 20001023				
US 2000-245234P P 20001103				
WO 2001-US32559 W 20011022				
AB	Hibernating myocardium is characterized by viable myocardium with impaired function due to localized reduced perfusion. Hibernating myocytes retain cellular integrity, but cannot sustain high-energy requirements of contraction. High plasma levels of catecholamines, such as norepinephrine, are believed to be predictive of mortality from hibernating myocardium. Likewise, high levels of catecholamines lead to cardiomyopathy in patients with diabetes. GLP-1 reduces plasma norepinephrine levels, and it thus is useful in a method of treating hibernating myocardium or diabetic cardiomyopathy.			
IT	421042-94-6 RL: PRP (Properties) (unclaimed protein sequence; treatment of hibernating myocardium and diabetic cardiomyopathy with a GLP-1 peptide)			
L2 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2003 ACS				
ACCESSION NUMBER: 2001:850956 HCAPLUS				
DOCUMENT NUMBER: 135:376777				
TITLE: Peptide pharmaceutical formulations				
INVENTOR(S): Holmquist, Barton; Dormady, Daniel C.				
PATENT ASSIGNEE(S): Bionebraska, Inc., USA				
SOURCE: PCT Int. Appl., 35 pp. CODEN: PIXXD2				
DOCUMENT TYPE: Patent				
LANGUAGE: English				
FAMILY ACC. NUM. COUNT: 1				
PATENT INFORMATION:				

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001087322	A2	20011122	WO 2001-US15872	20010517
WO 2001087322	A3	20020718		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002061838	A1	20020523	US 2001-858880	20010517
PRIORITY APPLN. INFO.:			US 2000-205377P	P 20000517
			US 2000-205262P	P 20000519
AB	A pharmaceutical compn. for administration to a mammal is disclosed. The compn. includes a therapeutically effective amt. of a peptide, such as a GLP-1 mol., a PTH mol., or a GRF mol. The compn. further includes a buffer including a weak acid having an acid dissocn. const. value of greater than about 1×10^{-5} , such as acetic acid. The compn. also includes an excipient for making the compn. generally isotonic, such as D-mannitol.			
IT	130357-25-4 , Exendin 3 (Heloderma horridum) RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (peptide pharmaceutical formulations relating to parathormone, glucagon-like peptide-1, and growth hormone-releasing factor)			
L2	ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2003 ACS			
ACCESSION NUMBER:	2001:650487 HCAPLUS			
DOCUMENT NUMBER:	135:205920			
TITLE:	Metabolic intervention with GLP-1 to improve the function of ischemic and reperfused tissue			
INVENTOR(S):	Coolidge, Thomas R.; Ehlers, Mario R. W.			
PATENT ASSIGNEE(S):	BioNebraska, Inc., USA			
SOURCE:	U.S., 10 pp. CODEN: USXXAM			
DOCUMENT TYPE:	Patent			
LANGUAGE:	English			
FAMILY ACC. NUM. COUNT:	3			
PATENT INFORMATION:				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6284725	B1	20010904	US 1999-302596	19990430
WO 2000066138	A2	20001109	WO 2000-US11251	20000427
WO 2000066138	A3	20010705		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				

Searcher : Shears 308-4994

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DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1173197 A2 20020123 EP 2000-926404 20000427
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO
NZ 514610 A 20020927 NZ 2000-514610 20000427
JP 2002543142 T2 20021217 JP 2000-615022 20000427
US 2002055460 A1 20020509 US 2001-851738 20010509
US 2002147131 A1 20021010 US 2001-953021 20010911
NO 2001005294 A 20011228 NO 2001-5294 20011029
PRIORITY APPLN. INFO.: US 1998-103498P P 19981008
US 1999-302596 A 19990430
WO 2000-US11251 W 20000427
US 2001-851738 A1 20010509
AB Individuals in need of treatment of ischemia-related reperfusion are
treated, preferably i.v., with a compn. which includes a compd.
which binds to a receptor for the glucagon-like peptide-1. The
invention relates to both the method and compns. for such treatment.
IT **306277-48-5**
RL: PRP (Properties)
(unclaimed protein sequence; metabolic intervention with GLP-1 to
improve the function of ischemic and reperfused tissue)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT
L2 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:525943 HCAPLUS
DOCUMENT NUMBER: 135:132445
TITLE: Use of exendins and agonists thereof for
modulation of triglyceride levels and treatment
of dyslipidemia
INVENTOR(S): Kolterman, Orville Gene; Young, Andrew A.
PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 161 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001051078	A1	20010719	WO 2001-US719	20010109
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1246638	A1	20021009	EP 2001-900978	20010109
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

Searcher : Shears 308-4994

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US 2003036504 A1 20030220 US 2001-756690 20010109
PRIORITY APPLN. INFO.: US 2000-175365P P 20000110
WO 2001-US719 W 20010109

AB Methods for modulating the levels of plasma triglyceride and other lipids in a subject comprise administration of an effective amt. of an exendin or exendin agonist, alone or in conjunction with other compds. or compns. that lower blood triglyceride and/or other lipid levels.

IT **306277-48-5**
RL: PRP (Properties)
(unclaimed protein sequence; use of exendins and agonists thereof for modulation of triglyceride levels and treatment of dyslipidemia)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:900675 HCAPLUS
DOCUMENT NUMBER: 134:51920
TITLE: GLP-1 as a diagnostic test to determine .beta.-cell function and the presence of impaired glucose tolerance (IGT) and type-II diabetes
INVENTOR(S): Holst, J. J.; Vilsboll, Tina
PATENT ASSIGNEE(S): Bionebraska, Inc., USA
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077039	A2	20001221	WO 2000-US16428	20000614
WO 2000077039	A3	20010329		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6344180	B1	20020205	US 1999-333415	19990615
EP 1185308	A2	20020313	EP 2000-939881	20000614
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: US 1999-333415 A 19990615
WO 2000-US16428 W 20000614

AB Since glucagon-like peptide-1 (GLP-1) is the most potent insulinotropic hormone known and has been shown to stimulate insulin secretion strongly in patients with type II diabetes, this invention uses GLP-1 or its biol. active analogs in .beta.-cell stimulatory tests in order to test .beta.-cell function in a simple way. The test provides information about insulin secretory capacity, is easy

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and reproducible and has insignificant side effects.

IT 306277-48-5

RL: PRP (Properties)

(unclaimed protein sequence; gLP-1 as a diagnostic test to det.
.beta.-cell function and the presence of impaired glucose
tolerance (IGT) and type-II diabetes)

L2 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:861704 HCAPLUS

DOCUMENT NUMBER: 134:37033

TITLE: Use of exendins and agonists thereof for the
treatment of gestational diabetes mellitus

INVENTOR(S): Hiles, Richard; Prickett, Kathryn S.

PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 133 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000073331	A2	20001207	WO 2000-US14231	20000523
WO 2000073331	A3	20010628		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6506724	B1	20030114	US 1999-323867	19990601
EP 1181043	A2	20020227	EP 2000-937710	20000523
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2003501361	T2	20030114	JP 2001-500655	20000523
PRIORITY APPLN. INFO.:			US 1999-323867	A 19990601
			WO 2000-US14231	W 20000523

AB Methods for treating gestational diabetes which comprise
administration of an effective amt. of an exendin or an exendin
agonist, alone or in conjunction with other compds. or compns. that
lower blood glucose levels.

IT 130357-25-4, Exendin 3 (Heloderma horridum)

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(use of exendins and agonists thereof for treatment of
gestational diabetes mellitus in relation to combination with
insulin or amylin agonist)

L2 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:824301 HCAPLUS

DOCUMENT NUMBER: 134:13338

TITLE: Long lasting insulinotropic peptides

INVENTOR(S): Bridon, Dominique P.; L'Archeveque, Benoit;

Searcher : Shears 308-4994

09/756690

Ezrin, Alan M.; Holmes, Darren L.; Leblanc,
Anouk; St. Pierre, Serge
PATENT ASSIGNEE(S): Conjuchem, Inc., Can.
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069911	A1	20001123	WO 2000-US13563	20000517
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
WO 2000070665	A2	20001123	WO 2000-IB763	20000517
WO 2000070665	A3	20010419		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1171582	A2	20020116	EP 2000-929748	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
EP 1180121	A1	20020220	EP 2000-930796	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000010750	A	20020226	BR 2000-10750	20000517
AU 754770	B2	20021121	AU 2000-48555	20000517
EP 1264840	A1	20021211	EP 2002-14617	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003500341	T2	20030107	JP 2000-619018	20000517
US 6329336	B1	20011211	US 2000-623618	20000905
US 6514500	B1	20030204	US 2000-657332	20000907
US 2002049153	A1	20020425	US 2001-876388	20010606
NO 2001005584	A	20020103	NO 2001-5584	20011115
PRIORITY APPLN. INFO.:			US 1999-134406P	P 19990517
			US 1999-159783P	P 19991015
			US 1999-153406P	P 19990910
			EP 2000-932570	A3 20000517
			WO 2000-IB763	W 20000517
			WO 2000-US13563	W 20000517
			US 2000-623618	A3 20000905
AB	Modified insulinotropic peptides are disclosed. The modified			

Searcher : Shears 308-4994

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insulinotropic peptides are capable of forming a peptidase stabilized insulinotropic peptide. The modified insulinotropic peptides are capable of forming covalent bonds with one or more blood components to form a conjugate. The conjugates may be formed in vivo or ex vivo. The modified peptides are administered to treat humans with diabetes and other related diseases.

IT 306277-48-5 308245-55-8 308806-01-1
309729-80-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(long lasting insulinotropic peptides with antidiabetic activity)

IT 130357-25-4P, Exendin 3 (Heloderma horridum)
308249-19-6P 309729-82-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(long lasting insulinotropic peptides with antidiabetic activity)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L2 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:824291 HCAPLUS

DOCUMENT NUMBER: 134:21425

TITLE: Protection of endogenous therapeutic peptides
from peptidase activity through conjugation to
blood components

INVENTOR(S): Bridon, Dominique P.; Ezrin, Alan M.; Milner,
Peter G.; Holmes, Darren L.; Thibaudeau, Karen

PATENT ASSIGNEE(S): Conjuchem, Inc., Can.

SOURCE: PCT Int. Appl., 733 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517
WO 2000069900	A3	20010215		
WO 2000069900	C2	20020704		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
WO 2000070665	A2	20001123	WO 2000-IB763	20000517
WO 2000070665	A3	20010419		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			

09/756690

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
GN, GW, ML, MR, NE, SN, TD, TG

EP 1105409 A2 20010613 EP 2000-936023 20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO

EP 1171582 A2 20020116 EP 2000-929748 20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO

EP 1264840 A1 20021211 EP 2002-14617 20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003500341 T2 20030107 JP 2000-619018 20000517
JP 2003508350 T2 20030304 JP 2000-618316 20000517
US 6514500 B1 20030204 US 2000-657332 20000907

PRIORITY APPLN. INFO.: US 1999-134406P P 19990517
US 1999-153406P P 19990910
US 1999-159783P P 19991015
EP 2000-932570 A3 20000517
WO 2000-IB763 W 20000517
WO 2000-US13576 W 20000517

AB A method for protecting a peptide from peptidase activity in vivo,
the peptide being composed of between 2 and 50 amino acids and
having a C-terminus and an N-terminus and a C-terminus amino acid
and an N-terminus amino acid is described. In the first step of the
method, the peptide is modified by attaching a reactive group to the
C-terminus amino acid, to the N-terminus amino acid, or to an amino
acid located between the N-terminus and the C-terminus, such that
the modified peptide is capable of forming a covalent bond in vivo
with a reactive functionality on a blood component. The solid phase
peptide synthesis of a no. of derivs. with 3-maleimidopropionic acid
(3-MPA) is described. In the next step, a covalent bond is formed
between the reactive group and a reactive functionality on a blood
component to form a peptide-blood component conjugate, thereby
protecting said peptide from peptidase activity. The final step of
the method involves the analyzing of the stability of the
peptide-blood component conjugate to assess the protection of the
peptide from peptidase activity. Thus, the percentage of a K5
kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH₂) conjugated to
human serum albumin via MPA remained relatively const. through a
24-h plasma assay in contrast to unmodified K5 which decreased to 9%
of the original amt. of K5 in only 4 h in plasma.

IT **308249-19-6P 308249-28-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic
use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or
reagent); USES (Uses)
(protection of endogenous therapeutic peptides from peptidase
activity through conjugation to blood components)

IT **306277-48-5 309257-17-8**
RL: PRP (Properties)
(unclaimed protein sequence; protection of endogenous therapeutic
peptides from peptidase activity through conjugation to blood
components)

L2 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:790546 HCAPLUS
DOCUMENT NUMBER: 133:359242

Searcher : Shears 308-4994

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TITLE: Modified exendins and exendin agonists
INVENTOR(S): Young, Andrew; Prickett, Kathryn
PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066629	A1	20001109	WO 2000-US11814	20000428
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1175443	A1	20020130	EP 2000-928685	20000428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000010705	A	20020205	BR 2000-10705	20000428
JP 2002544127	T2	20021224	JP 2000-615657	20000428
PRIORITY APPLN. INFO.: US 1999-132018P P 19990430 WO 2000-US11814 W 20000428				
AB Novel modified exendins and exendin agonists having an exendin or exendin agonist linked to one or more polyethylene glycol polymers, for example, and related formulations and dosages and methods of administration thereof are provided. These modified exendins and exendin agonists, compns. and methods are useful in treating diabetes and conditions that would be benefited by lowering plasma glucose or delaying and/or slowing gastric emptying or inhibiting food intake.				
IT 130357-25-4, Exendin 3 (Heloderma horridum) RL: PRP (Properties) (unclaimed sequence; modified exendins and exendin agonists)				
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L2 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:790326 HCAPLUS
DOCUMENT NUMBER: 133:345167
TITLE: Metabolic intervention with GLP-1 or its
biologically active analogues to improve the
function of the ischemic and reperfused brain
INVENTOR(S): Coolidge, Thomas R.; Ehlers, Mario R. W.
PATENT ASSIGNEE(S): Bionebraska, Inc., USA
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

Searcher : Shears 308-4994

09/756690

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066142	A2	20001109	WO 2000-US11652	20000501
WO 2000066142	A3	20020124		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6429197	B1	20020806	US 1999-303016	19990430
EP 1187628	A2	20020320	EP 2000-928616	20000501
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002543145	T2	20021217	JP 2000-615026	20000501
NO 2001005298	A	20011228	NO 2001-5298	20011029
PRIORITY APPLN. INFO.:				
			US 1999-303016	A 19990430
			US 1998-103498P	P 19981008
			WO 2000-US11652	W 20000501
AB It has now been discovered that GLP-1 treatment after acute stroke or hemorrhage, preferably i.v. administration, can be an ideal treatment because it provides a means for optimizing insulin secretion, increasing brain anabolism, enhancing insulin effectiveness by suppressing glucagon, and maintaining euglycemia or mild hypoglycemia with no risk of severe hypoglycemia.				
IT 306277-48-5				
RL: PRP (Properties) (unclaimed protein sequence; metabolic intervention with GLP-1 or its biol. active analogs to improve the function of the ischemic and reperfused brain)				
L2 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2003 ACS				
ACCESSION NUMBER: 2000:790323 HCAPLUS				
DOCUMENT NUMBER: 133:345166				
TITLE: Metabolic intervention with GLP-1 to improve the function of ischemic and reperfused tissue				
INVENTOR(S): Coolidge, Thomas R.; Ehlers, Mario R. W.				
PATENT ASSIGNEE(S): Bionebraska, Inc., USA				
SOURCE: PCT Int. Appl., 22 pp. CODEN: PIXXD2				
DOCUMENT TYPE: Patent				
LANGUAGE: English				
FAMILY ACC. NUM. COUNT: 3				
PATENT INFORMATION:				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066138	A2	20001109	WO 2000-US11251	20000427
WO 2000066138	A3	20010705		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,				

Searcher : Shears 308-4994

09/756690

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 6284725 B1 20010904 US 1999-302596 19990430
EP 1173197 A2 20020123 EP 2000-926404 20000427
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO
NZ 514610 A 20020927 NZ 2000-514610 20000427
JP 2002543142 T2 20021217 JP 2000-615022 20000427
NO 2001005294 A 20011228 NO 2001-5294 20011029
PRIORITY APPLN. INFO.: US 1999-302596 A 19990430
US 1998-103498P P 19981008
WO 2000-US11251 W 20000427
AB Individuals in need of treatment of ischemia-related reperfusion are
treated, preferably i.v., with a compn. which includes a compd.
which binds to a receptor for the glucagon-like peptide-1. The
invention relates to both the method and compns. for such treatment.
IT 306277-48-5
RL: PRP (Properties)
(unclaimed sequence; metabolic intervention with GLP-1 to improve
the function of ischemic and perfused tissue)
L2 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:493318 HCAPLUS
DOCUMENT NUMBER: 133:129880
TITLE: Methods using an exendin or related substance
for glucagon suppression
INVENTOR(S): Young, Andrew; Gedulin, Bronislava
PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000041548	A2	20000720	WO 2000-US942	20000114
WO 2000041548	A3	20001130		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2356331	AA	20000720	CA 2000-2356331	20000114
EP 1143989	A2	20011017	EP 2000-902415	20000114
EP 1143989	A3	20020911		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000007823	A	20011120	BR 2000-7823	20000114
JP 2002538084	T2	20021112	JP 2000-593169	20000114
NO 2001003469	A	20010914	NO 2001-3469	20010712

Searcher : Shears 308-4994

09/756690

PRIORITY APPLN. INFO.:

US 1999-116380P P 19990114
US 1999-132017P P 19990430
US 2000-175365P P 20000110
WO 2000-US942 W 20000114

AB Methods are provided for use of an exendin, an exendin agonist, or a modified exendin or exendin agonist having an exendin or exendin agonist linked to one or more polyethylene glycol polymers, for example, for lowering glucagon levels and/or suppressing glucagon secretion in a subject. These methods are useful in treating hyperglucagonemia and other conditions that would be benefited by lowering plasma glucagon or suppressing glucagon secretion.

IT 130357-25-4P, Exendin 3 (Heloderma horridum)

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(exendin or related substance for glucagon suppression)

L2 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:493315 HCAPLUS

DOCUMENT NUMBER: 133:135612

TITLE: Novel exendin agonist formulations and methods of administration thereof

INVENTOR(S): Young, Andrew; L'Italien, James J.; Kolterman, Orville

PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 281 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000041546	A2	20000720	WO 2000-US902	20000114
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2356706	AA	20000720	CA 2000-2356706	20000114
EP 1140145	A2	20011010	EP 2000-914425	20000114
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000007820	A	20011120	BR 2000-7820	20000114
JP 2002534450	T2	20021015	JP 2000-593167	20000114
NO 2001003468	A	20010914	NO 2001-3468	20010712

PRIORITY APPLN. INFO.:

US 1999-116380P P 19990114
US 2000-175365P P 20000110
WO 2000-US902 W 20000114

AB Novel exendin and exendin agonist compd. formulations and dosages and methods of administration thereof are provided. These compns. and methods are useful in treating diabetes and conditions that

would be benefited by lowering plasma glucose or delaying and/or slowing gastric emptying or inhibiting food intake.

IT **130357-25-4P**, Exendin-3 (*Heloderma horridum*)
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
 (amino acid sequence; novel exendin agonist formulations and methods of administration thereof as antidiabetic agents and appetite suppressants)

L2 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1998:112250 HCAPLUS
 DOCUMENT NUMBER: 128:192936
 TITLE: Preparation of exendin peptide analogs as agonists for regulating gastrointestinal motility
 INVENTOR(S): Young, Andrew A.; Gedulin, Bronislava; Beeley, Nigel Robert Arnold; Prickett, Kathryn S.
 PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA; Young, Andrew A.; Gedulin, Bronislava; Beeley, Nigel Robert Arnold; Prickett, Kathryn S.
 SOURCE: PCT Int. Appl., 70 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805351	A1	19980212	WO 1997-US14199	19970808
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9740636	A1	19980225	AU 1997-40636	19970808
EP 966297	A1	19991229	EP 1997-938261	19970808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001501593	T2	20010206	JP 1998-508263	19970808
PRIORITY APPLN. INFO.:			US 1996-694954	A 19960808
			WO 1997-US14199	W 19970808

OTHER SOURCE(S): MARPAT 128:192936
 AB Methods for reducing gastric motility and delaying gastric emptying for therapeutic and diagnostic purposes are disclosed which comprise administration of an effective amt. of an exendin or an exendin agonist H-Xaa1-Xaa2-Xaa3-Gly-Thr-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Ser-Lys-Gln-Xaa9-Glu-Glu-Glu-Ala-Val-Arg-Leu-Xaa10-Xaa11-Xaa12-Xaa13-Leu-Lys-Asn-Gly-Gly-Xaa14-Ser-Ser-Gly-Ala-Xaa15-Xaa16-Xaa17-Xaa18-Z [Xaa1 = His, Arg, Tyr; Xaa2 = Ser, Gly, Ala, Thr; Xaa3, Xaa7, Xaa12 = independently Asp, Glu; Xaa4, Xaa10 = independently Phe, Tyr,

naphthylalanine; Xaa5, Xaa6 = independently Thr, Ser; Xaa8, Xaa9 = independently Leu, Ile, Val, pentylglycine, Met; Xaa11 = any group Xaa8, tert-butylglycine; Xaa13 = any group Xaa4, Trp; Xaa14-Xaa17 = independently Pro, homoproline, 3-Hyp, 4-Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine, N-alkylalanine; Xaa18 = Ser, Thr, Tyr; Z = OH, NH₂; with the proviso that the compd. does not have the formula of exendin-3 or exendin-4] or a pharmaceutically acceptable salt thereof. Methods for treating conditions assocd. with elevated, inappropriate, or undesired post-prandial blood glucose levels are disclosed which comprise administration of an effective amt. of an exendin or an exendin agonist alone or in conjunction with other anti-gastric emptying agents. Thus, exendin-4 acid and [Leu14,Phe25]-exendin-4, prepd. by std. solid-phase methods on a 4-(2,4-dimethoxyphenyl)-Fmoc-aminomethylphenoxyacetamide norleucine-MBHA resin using 9-fluorenylmethoxycarbonyl (Fmoc)-protected amino acids, inhibited gastric emptying in male HSD rats with EC₅₀ = 0.12 and 0.29 .mu.g. Exendin-4 showed EC₅₀ = 0.27 .mu.g under the same conditions.

IT **130357-25-4P**, Exendin-3 (*Heloderma horridum*)
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of exendin peptide analogs as agonists for regulating gastrointestinal motility)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:675100 HCAPLUS

DOCUMENT NUMBER: 123:74913

TITLE: Exendin-3 and exendin-4 polypeptides, and pharmaceutical compositions comprising them

INVENTOR(S): Eng, John

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 17 pp.
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5424286	A	19950613	US 1993-66480	19930524
PRIORITY APPLN. INFO.:			US 1993-66480	19930524

AB This invention encompasses pharmaceutical compns. contg. exendin-3 or exendin-4, fragments thereof, or any combination thereof, and methods for the treatment of diabetes mellitus and the prevention of hyperglycemia.

IT **130357-25-4**, Exendin 3 (*Heloderma horridum*)
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (exendin-3 and exendin-4 polypeptides, and pharmaceutical compns. comprising them)

09/756690

L2 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:622490 HCAPLUS
DOCUMENT NUMBER: 121:222490
TITLE: Use of 125I-[Y39]exendin-4 to characterize
exendin receptors on dispersed pancreatic acini
and gastric chief cells from guinea pig
AUTHOR(S): Singh, Gurcharn; Eng, John; Raufman, Jean-Pierre
CORPORATE SOURCE: Gastrointestinal Cell Biology Laboratory, State
University of New York-Health Science Center at
Brooklyn, 450 Clarkson Avenue-Box 1196,
Brooklyn, NY, 11203-2098, USA
SOURCE: Regulatory Peptides (1994), 53(1), 47-59
CODEN: REPPDY; ISSN: 0167-0115
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We synthesized and iodinated an exendin-4 analog, [Y39]exendin-4
(700 Ci/mmol), for use as a radioligand to characterize exendin
receptors on dispersed pancreatic acini and gastric chief cells from
guinea pig. Binding of this bioactive radioligand was rapid,
temp.-dependent and specific (not inhibited by other pancreatic or
gastric secretagogues). Measurement of the ability of exendin-4 to
inhibit the binding of 125I-[Y39]exendin-4 indicated the presence of
two classes of receptors. Pancreatic acini had 12.5 .times. 1010
binding sites/mg acinar protein of which 6% were high affinity (Kd =
0.5 nM) and 94% were low affinity (Kd = 0.1 .mu.M). Chief cells had
3370 binding sites/cell of which 9% were high affinity (Kd = 0.3 nM)
and 91% were low affinity (Kd = 0.2 .mu.M). Washing with 0.2 M
acetic acid (pH 2.5), 0.2 M glycine (pH 10.5), or trypsin (100
.mu.g/mL) after 30 min incubation at 37.degree., indicated that 63
and 49% of radioligand was internalized in acini and chief cells,
resp. Truncated glucagon-like peptide-1 (tGLP-1), a mammalian
peptide sharing 53% homol. with exendin-4, inhibited radioligand
binding at the same concns. that altered secretion from acini and
chief cells. Glucagon, GLP-1 and GLP-2 inhibited
125I-[Y39]exendin-4 binding only at concns. .gtoreq.100 nM.
Exendin(9-39)NH2, a specific exendin-receptor antagonist, potently
inhibited 125I-[Y39] exendin-4 binding (IC50 = 6.1 and 3.5 nM in
acini and chief cells, resp.). In pancreatic acini and gastric
chief cells from guinea pig, exendin-3, exendin-4 and tGLP-1
increase cellular cAMP and modulate enzyme secretion by interacting
with high-affinity exendin receptors. 125I-[Y39] exendin-4 is a
useful radioligand for studying exendin receptors.
IT 130357-25-4, Exendin 3 (Heloderma horridum)
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); BIOL (Biological study)
(cAMP formation and enzyme secretion by pancreas acinus and
stomach chief cells response to)

L2 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:608593 HCAPLUS
DOCUMENT NUMBER: 113:208593
TITLE: Purification and structure of exendin-3, a new
pancreatic secretagogue isolated from Heloderma
horridum venom
AUTHOR(S): Eng, John; Andrews, P. C.; Kleinman, Wayne A.;
Singh, Latika; Raufman, Jean Pierre
CORPORATE SOURCE: Solomon A. Berson Res. Lab., Veterans Aff. Med.
Cent., Bronx, NY, 10468, USA

09/756690

SOURCE: Journal of Biological Chemistry (1990), 265(33),
20259-62

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An assay for His1 peptides performed by amino-terminal amino acid sequencing was used to screen venom from the Gila monster lizard, *H. horridum*. Two His1 peptides were identified: helospectin and a new His1 peptide that has been named exendin-3 to indicate that it is the third peptide to be found in an exocrine secretion of *Heloderma* lizards which has endocrine activity, the first two being helospectin (exendin-1) and helodermin (exendin-2). In the lot of *H. horridum* venom tested, exendin-3 was 5-10-fold more abundant in molar concn. than helospectin. The structure of exendin-3 was analyzed by amino acid sequencing and mass spectrometry. Exendin-3 is a 39-amino acid peptide with a mass of 4200. It contains a carboxyl-terminal amide and has a strong homol. with secretin at its amino-terminal 12 amino acids. The complete structure of exendin-3 is: His-Ser-Asp-Gly-Thr-Phe-Thr-Ser-Asp-Leu-Ser-Lys-Gln-Met-Glu-Glu-Glu-Ala-Val-Arg-Leu-Phe-Ile-Glu-Trp-Leu-Lys-Asn-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Pro-Ser. It is 32 and 26% homologous with helospectin and helodermin, resp. It has greatest homol. with glucagon (48%) and human glucagon-like peptide-1 (50%). Exendin-3 (3 .mu.M) stimulated increases in cellular cAMP and amylase release from dispersed guinea pig pancreatic acini.

IT 130357-25-4, Exendin 3 (*Heloderma horridum*)

RL: PRP (Properties)

(amino acid sequence of)

FILE 'HOME' ENTERED AT 14:27:54 ON 28 MAR 2003

Jiang, D. 09/17/99
Seq. ID 1

GenCore version 5.1.4.p5.4578
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OM protein - protein search, using sw model

Run on: March 28, 2003, 08:25:12 ; Search time 74 Seconds
(without alignments)
70.227 Million cell updates/sec

Title: US-09-756-690A-1

Perfect score: 208

Sequence: 1 HSDGFTSLSKQWEEAVRLFIEWLKNGPSSGAPPPS 39

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match, 0%

Maximum Match, 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	208	100.0	39	16	AA80545 Heloderma horridum
2	208	100.0	39	19	AAW61769 Extensin-3, for use
3	208	100.0	39	19	AAW47608 Gila monster extend
4	208	100.0	39	20	AAV31501 Extensin-3 peptide
5	208	100.0	39	20	AAV03717 Amino acid sequenc
6	208	100.0	39	21	AAW11281 H. horridum extendi
7	208	100.0	39	21	AAW52871 Amino acid sequenc
8	208	100.0	39	21	AAV94010 Amino acid sequenc
9	208	100.0	39	22	AAU07378 Glucagon-like pept
10	208	100.0	39	22	AAE08345 Heloderma horridum

11	208	100.0	39	22	AA891190 Pancreatic hormone
12	208	100.0	39	22	AA860252 Gila monster venom
13	208	100.0	39	22	AA864181 Mexican beaded liz
14	208	100.0	39	22	AA488000 Extensin-3, SEQ ID
15	208	100.0	39	22	AA36419 Gila monster venom
16	208	100.0	39	22	AA36432 Gila monster venom
17	208	100.0	39	22	AA885925 Gila monster venom
18	208	100.0	39	23	AB80100 Glucagon like pept
19	208	100.0	39	23	AAE14425 Gila monster extend
20	208	100.0	39	23	AB07149 Gila monster venom
21	208	100.0	40	22	AA891199 Pancreatic hormone
22	208	100.0	40	22	AA488008 Insulinotropic pep
23	208	100.0	40	22	AA48823 Extensin-3(1-39),lys
24	204	98.1	39	21	AA811288 extensin agonist pe
25	204	98.1	39	21	AA94018 Amino acid sequenc
26	204	98.1	39	22	AAE08358 Extensin agonist pe
27	200	96.2	39	16	AA80546 Heloderma suspectu
28	200	96.2	39	19	AAW61770 Extensin-4, for use
29	200	96.2	39	19	AAW47609 Extensin-4 peptide
30	200	96.2	39	20	AAV31502 Amino acid sequenc
31	200	96.2	39	20	AAV03718 H. suspectum extend
32	200	96.2	39	21	AA811282 extensin agonist pe
33	200	96.2	39	21	AA811305 extensin agonist pe
34	200	96.2	39	21	AA811306 extensin agonist pe
35	200	96.2	39	21	AA811307 extensin agonist pe
36	200	96.2	39	21	AA811308 Extensin-4 peptide
37	200	96.2	39	21	AA852840 Extensin-4 peptide
38	200	96.2	39	21	AA852841 Extensin-4 peptide
39	200	96.2	39	21	AA852842 Extensin-4 peptide
40	200	96.2	39	21	AA852857 Extensin-4 peptide
41	200	96.2	39	21	AA852858 Extensin-4 peptide
42	200	96.2	39	21	AA852872 Gila monster exten
43	200	96.2	39	21	AA94011 Amino acid sequenc
44	200	96.2	39	21	AAV78957 Extensin-4 (1-39)
45	200	96.2	39	22	AAU07380 Glucagon-like pept

ALIGNMENTS

RESULT 1

AA80545

ID AA80545 standard; peptide; 39 AA.

AC AA80545;

DT 27-FEB-1996 (first entry)

XX Heloderma horridum extensin-3.

DE Extensin-3; diabetes mellitus; hyperglycaemia; insulinotropic peptide.

XX Heloderma horridum.

PN US5424286-A.

XX 13-JUN-1995.

XX 24-MAY-1993; 93US-0066480.

PR 24-MAY-1993; 93US-0066480.

PA (ENGJ/) ENG J.

PI Eng J;

DR WPI; 1995-262627/34.

XX Stimulating/inhibiting insulin release with extensin polypeptide(s) -

PT for treating diabetes mellitus and preventing hyperglycaemia.

XX Claim 5; Columns 13-14; 17pp; English.

XX

CC AAR80545 is Heloderma horridum extendin-3. It is an
 CC insulinotropic peptide, and can therefore be used in the treatment of
 CC diabetes mellitus (types I or II), and for the prevention of
 CC hyperglycaemia. It normalises hyperglycaemia through glucose-dependent
 CC and insulin-(in)dependent mechanisms.

XX SQ Sequence 39 AA;
 Query Match 100.0%; Score 208; DB 16; Length 39;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTTSDLSKQMEEEAVRLFIEWLKNGGSSGAPPPS 39
 |||||||||||||||||||||||||||||||||||||||||
 DB 1 HSDGTTSDLSKQMEEEAVRLFIEWLKNGGSSGAPPPS 39

RESULT 2
 AAW61769
 ID AAW61769 standard; peptide; 39 AA.

XX AC AAW61769;
 XX DT 29-MAR-1999 (first entry)
 XX DE Extendin-3, for use in treating disorders related to food intake.
 XX KW Extendin; obesity; type II diabetes; eating disorders; cardiac disease;
 XX KW insulin resistance syndrome; elevated plasma glucose level; agonist.
 XX OS Heloderma horridum.
 XX PN WO9830231-A1.
 XX PD 16-JUL-1998.
 XX PF 07-JAN-1998; 98WO-US00449.
 XX PR 14-NOV-1997; 97US-0066029.
 XX PR 07-JAN-1997; 97US-0034905.
 XX PR 08-AUG-1997; 97US-0055404.
 XX PR 14-NOV-1997; 97US-0065442.
 XX PA (AMYL-) AMYLIN PHARM INC.
 XX PI Beeley NRA, Bhavsar S, Prickett KS;
 XX DR WPI; 1998-398796/34.

XX PT Reducing food intake by administering extendins or their
 XX PT analogues - for treatment of e.g. obesity, type II diabetes,
 XX PT eating disorders and insulin resistance
 XX PS Claims 16, 24; Page 8; 214pp; English.
 XX CC The invention relates to a new method for treating disorders that
 XX CC are alleviated by reducing food intake, in particular obesity, type
 XX CC II diabetes, eating disorders, insulin resistance syndrome, elevated
 XX CC plasma glucose levels, or the risk of cardiac disease. The method
 XX CC comprises administering an extendin or an extendin agonist. The treatment
 XX CC reduces appetite and lowers plasma lipid levels. It inhibits food
 XX CC consumption as effectively as amylin or cholecystokinin but has a much
 XX CC longer-lasting action (still effective after 6 hours in a mouse model).
 XX CC The present sequence is that of extendin-3 which is one of the preferred
 XX CC compounds for use in the method.

XX SQ Sequence 39 AA;
 Query Match 100.0%; Score 208; DB 19; Length 39;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTTSDLSKQMEEEAVRLFIEWLKNGGSSGAPPPS 39

DB 1 HSDGTTSDLSKQMEEEAVRLFIEWLKNGGSSGAPPPS 39
 |||||||||||||||||||||||||||||||||||||||||

RESULT 3
 AAW47608
 ID AAW47608 standard; peptide; 39 AA.

XX AC AAW47608;
 XX DT 03-JUL-1998 (first entry)
 XX DE Gila monster extendin-3.
 XX KW Extendin agonist; gastric motility; gastric emptying; treatment;
 XX KW spasm; postprandial dumping syndrome; postprandial hyperglycaemia;
 XX KW type I diabetes; impaired glucose tolerance; toxin ingestion;
 XX KW obesity; Gila monster venom; extendin-3.

XX OS Heloderma horridum.

XX PH Key Location/Qualifiers
 XX FT Modified-site 39
 XX FT /note= "amidated"

XX PN WO9805351-A1.

XX PD 12-FEB-1998.

XX PF 08-AUG-1997; 97WO-US14199.

XX PR 08-AUG-1996; 96US-0694954.

XX PA (AMYL-) AMYLIN PHARM INC.

XX PI Beeley NRA, Gedulin B, Prickett KS, Young AA;

XX DR WPI; 1998-145351/13.

XX PT Regulating gastrointestinal motility using extendins or their
 XX PT agonists - for treating spasm, diabetic postprandial hyperglycaemia,
 XX PT impaired glucose tolerance etc., also in diagnostic investigations
 XX PS Claims 20 and 21; Fig 1; 70pp; English.

XX CC AAW47549 describes a generic extendin agonist, provided that it does
 XX CC have the formula of either extendin-3 (AAW47608) or extendin-4
 XX CC (AAW47609).

XX CC Extendin agonists, which reduce gastric motility and delay gastric
 XX CC emptying, can be used to treat spasm (where associated with acute
 XX CC diverticulitis or disorders of the biliary tract or sphincter of
 XX CC Oddi), postprandial dumping syndrome and hyperglycaemia
 XX CC (particularly associated with type 2 diabetes), type I diabetes,
 XX CC impaired glucose tolerance, toxin ingestion (an extendin agonist is
 XX CC administered to prevent stomach contents passing into the
 XX CC intestines, then the stomach pumped) and obesity. They can also be
 XX CC administered to subjects undergoing gastrointestinal diagnostic
 XX CC investigation, particularly radiological or by magnetic resonance
 XX CC imaging.

XX CC Extending, components of Gila monster venom, have some sequence
 XX CC similarity to glucagon-like peptides (GLP). They are GLP agonists
 XX CC and have been suggested (US5424286) for treatment of diabetes and
 XX CC prevention of hyperglycaemia.

XX SQ Sequence 39 AA;

Query Match 100.0%; Score 208; DB 19; Length 39;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;

Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTTSDLSKQMEEEAVRLFIEWLKNGGSSGAPPPS 39
 |||||||||||||||||||||||||||||||||||||||||

DB 1 HSDGTTSDLSKQMEEEAVRLFIEWLKNGGSSGAPPPS 39

[illegible]

XX Lowering plasma glucagon using exendin, an exendin agonist, a modified
PT exendin or a modified exendin agonist, useful for treating
PT hyperglucagonemia and diabetes -
XX
XX Example 1; Fig 1; 96pp; English.
XX
CC The present sequence represents an exendin-3 peptide. Exendins are
CC found in the salivary glands of the Gila monster and Mexican Beaded
CC lizard, and have sequence similarity to glucagon-like peptides. It is
CC used in the method of the invention. The specification describes a
CC method for lowering plasma glucagon, comprising administering an
CC agonist, an exendin agonist, a modified exendin or a modified exendin
CC agonist. These compounds lower plasma glucagon level. The method is
CC useful for lowering plasma glucagon in subjects, preferably humans,
CC suffering from necrolytic erythema or glucagonoma. The method is also
CC useful for treating hyperglucagonemia and other conditions that would
CC benefit from reduced glucagon levels and/or suppression of glucagon,
CC e.g. type 1 and type 2 diabetes.
XX
XX Sequence 39 AA;
XX
XX Query Match 100.0%; Score 208; DB 21; Length 39;
XX Best Local Similarity 100.0%; Pred. No. 9.2e-19;
XX Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 HSDGTFSTLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
DB 1 HSDGTFSTLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
XX
XX RESULT 9
XX AAU07378
XX ID AAU07378 standard; peptide; 39 AA.
XX AC AAU07378;
XX AD
XX DT 18-DEC-2001 (first entry)
XX DE Glucagon-like peptide-1 (GLP-1) homologue, exendin 3.
XX
XX Antidiarrhoeic; antiinflammatory; antiaddictive; premedication;
KW antro-duodenal motility; glucagon-like peptide-1; GLP-1; endoscopy;
KW diarrhoea; post-operative dumping syndrome; irritable bowel syndrome;
KW narcotics withdrawal; exendin 3.
XX
XX Homo sapiens.
XX OS
XX PN WO200168112-A2.
XX
XX 20-SEP-2001.
XX
XX 14-MAR-2001; 2001WO-EF02982.
XX
XX 14-MAR-2000; 2000US-189091P.
XX
XX (GOEK)/ GOEKE B.
XX (SCHI)/ SCHIRRA J.
XX
XX Goeke B, Schirra J;
XX WPI; 2001-596887/67.
XX
XX Inhibiting antro-duodenal motility, useful to prevent or treat
PT gastrointestinal disorders such as irritable bowel syndrome and
PT non-infectious diarrhoea, comprises administering glucagon-like peptide
PT -
XX
XX Disclosure; Page 13; 43pp; English.
XX
XX The invention relates to a method of inhibiting antro-duodenal motility
CC in a patient, comprising administering a glucagon-like peptide (GLP-1)
CC molecule. The method is used to premedicate or in endoscopic

CC procedures or to treat or prevent non-infectious acute and chronic
CC diarrhoea, post-operative dumping syndrome, irritable bowel syndrome or
CC symptoms associated with narcotics withdrawal. Unlike prior art treatment
CC with glucagon, the invention is not contraindicated in persons with
CC diabetes, does not incur the risks of side effects such as nausea, and is
CC not expensive. The present sequence represents mammalian glucagon-like
CC peptide-1, (GLP-1) homologue, exendin 3 as described in the method of the
CC invention.
XX
XX Sequence 39 AA;
XX
XX Query Match 100.0%; Score 208; DB 22; Length 39;
XX Best Local Similarity 100.0%; Pred. No. 9.2e-19;
XX Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 HSDGTFSTLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
DB 1 HSDGTFSTLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
XX
XX RESULT 10
XX AAE08345
XX ID AAE08345 standard; peptide; 39 AA.
XX AC AAE08345;
XX AD
XX DT 01-NOV-2001 (first entry)
XX DE Heloderma horridum exendin-3 peptide.
XX
XX Exendin-3; antilipemic; cardiant; triglyceride; inotropic; diuretic;
KW coronary heart disease; dyslipidaemia.
XX
XX Heloderma horridum.
XX OS
XX PH Key Location/Qualifiers
XX FT Modified-site 39 /note= "C-terminal amide"
XX FT
XX WO200151078-A1.
XX
XX 19-JUL-2001.
XX
XX 09-JAN-2001; 2001WO-US00719.
XX
XX 10-JAN-2000; 2000US-0175365.
XX
XX (AMYL-) AMYLIN PHARM INC.
XX
XX Kolterman OG, Young AA;
XX WPI; 2001-514422/56.
XX
XX Use of exendin and exendin agonist compounds for modulating
PT triglyceride levels, and treating heart disease and dyslipidemia
XX
XX Disclosure; Page 10; 161pp; English.
XX
XX The patent discloses a method for modulating plasma or postprandial
CC triglyceride and other lipid levels by administering exendin or an
CC exendin agonist. Exendins have inotropic and diuretic effects. They
CC suppress the secretion of glucagon. Exendin and its agonists have
CC a significant effect on the reduction of blood serum triglyceride
CC concentrations. They are used to treat coronary heart disease and
CC dyslipidaemia, and for modifying postprandial triglyceride levels.
CC The present sequence is exendin-3 peptide from Heloderma horridum.
XX
XX Sequence 39 AA;
XX
XX Query Match 100.0%; Score 208; DB 22; Length 39;
XX Best Local Similarity 100.0%; Pred. No. 9.2e-19;
XX Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
 ID AAB60252 standard; peptide; 39 AA.
 DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 11

AAB91190
 ID AAB91190 standard; Peptide; 39 AA.
 XX
 AC AAB91190;
 DT 22-JUN-2001 (first entry)
 XX Pancreatic hormone glucagon peptide SEQ ID NO:364.
 DE
 XX Protection; endogenous therapeutic peptide; peptidase; conjugation;
 KW blood component; modification; succinimidy; maleimido group; amino;
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX WO200069900-A2.
 PN 23-NOV-2000.
 PD
 XX 17-MAY-2000; 2000WO-US13576.
 XX
 PR 17-MAY-1999; 99US-0134406.
 PR 10-SEP-1999; 99US-0153406.
 PR 15-OCT-1999; 99US-0159783.
 XX (CONJ-) CONJUCHEM INC.
 PA
 XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;
 PI WPI; 2001-112059/12.
 XX
 PR Modifying and attaching therapeutic peptides to albumin prevents
 PT peptidase degradation, useful for increasing length of in vivo activity
 PT
 PS Disclosure; Page 315; 733pp; English.
 XX
 CC The present invention describes a modified therapeutic peptide (I)
 CC comprising a therapeutically active amino acid region (III) and a
 CC reactive group (II) (e.g. succinimidy and maleimido groups) attached to
 CC a less therapeutically active amino acid region (IV), which covalently
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a
 CC peptide stabilised therapeutic peptide composed of 3-50 amino acids,
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth
 CC factors and neurotransmitters, to protect them from peptidase activity
 CC in vivo for the treatment of various disorders. Endogenous therapeutic
 CC peptides are not suitable as drug candidates as they require frequent
 CC administration due to rapid degradation by peptidases in the body.
 CC Modifying and attaching therapeutic peptides to albumin prevents or
 CC reduces the action of peptidases to increase length of activity (half
 CC life) and specificity as bonding to large molecules decreases
 CC intracellular uptake and interference with physiological processes.
 CC AAB90829 to AAB92441 represent peptides which can be used in the
 CC exemplification of the present invention.
 XX
 SQ Sequence 39 AA;
 Query Match 100.0%; Score 208; DB 22; Length 39;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
 DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 12
 AAB60252
 ID AAB60252 standard; peptide; 39 AA.
 XX
 AC AAB60252;
 DT 28-MAR-2001 (first entry)
 XX
 DE Gila monster venom GLP-1 analogue, exendin 3.
 DE
 XX Exendin 3; Gila monster venom; GLP-1 analogue; glucagon-like peptide-1;
 KW type II diabetes; non-insulin dependent diabetes mellitus; NIDDM;
 KW beta-cell function; secretory capacity; impaired glucose tolerance; IGT;
 XX beta-cell stimulatory test; diagnostic test; insulinotropic.
 XX
 OS Heloderma suspectum.
 OS
 PN WO200077039-A2.
 XX
 PD 21-DEC-2000.
 XX
 PF 14-JUN-2000; 2000WO-US16428.
 PF
 XX 15-JUN-1999; 99US-0333415.
 PR
 XX (BION-) BIONEBRASKA INC.
 PA
 XX Holst JJ, Vilsboll T;
 PI WPI; 2001-102518/11.
 DR
 XX Evaluating beta-cell secretory capacity and responsiveness to glucose,
 PT useful for diagnosing impaired glucose tolerance and diabetes,
 PT comprises employing glucagon-like-peptide-1 as a diagnostic test to
 PT determine beta-cell function
 XX
 PS Disclosure; Page 13; 42pp; English.
 XX
 CC The invention relates to a new method for evaluating beta-cell secretory
 CC capacity in an individual, or responsiveness of a beta-cell to glucose,
 CC comprising the administration of glucose and glucagon-like peptide-1
 CC (GLP-1) or its biologically active analogues. The response in the
 CC individual is then measured against the standard response of a healthy
 CC individual to determine if the individual has impaired beta-cell
 CC function. The method is useful for detecting impaired beta-cell function
 CC in an individual, and is particularly useful for diagnosing impaired
 CC glucose tolerance (IGT) and non-insulin-dependent (type II) diabetes.
 CC The method is a rapid test of beta-cell function, which is a marker for
 CC impaired glucose tolerance. Unlike prior methods, the method is reliable
 CC and without significant adverse side effects and/or patient pain and
 CC discomfort. The method also provides information about insulin secretory
 CC capacity, and is easy and reproducible. The present sequence represents
 CC a Gila monster venom GLP-1 analogue peptide referred to in the disclosure
 CC of the invention.
 XX
 SQ Sequence 39 AA;
 Query Match 100.0%; Score 208; DB 22; Length 39;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
 DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 13
 AAB64181
 ID AAB64181 standard; peptide; 39 AA.
 XX
 AC AAB64181;
 XX
 DT 27-MAR-2001 (first entry)

Fri Mar 28 12:12:49 2003

28-FEB-2001 (first entry)

Gila monster venom extendin 3 peptide SEQ ID NO:7.

Glucagon-like peptide-1; GLP-1; GLP-2; vasotrophic; cerebroprotective; brain tissue injury; reperfusion; blood flow; ischaemia; acute stroke; metabolic intervention; haemorrhage; tissue damage; medical procedure; surgical; insulin; hyperglycaemia; hypoglycaemia; brain anabolism; euglycaemia.

Heloderma suspectum.

Key Location/Qualifiers

Modified-site 39 /note= "amidated"

WO2000066142-A2.

09-NOV-2000.

01-MAY-2000; 2000WO-US11652.

30-APR-1999; 99US-0303016.

(BION-) BIONEERASKA INC.

Coollidge TR, Ehlers MRW;

WPI; 2001-015911/02.

A method for amelioration of brain tissue injury comprises administering a composition including a compound which binds to a receptor for glucagon-like peptide-1.

Disclosure: Page 8; 19pp; English.

The present invention describes a method for the amelioration of brain tissue injury caused by reperfusion of blood flow comprising administering a composition including a compound which binds to a receptor for glucagon-like peptide-1 (GLP-1), in a pharmaceutical carrier. The method is used for amelioration of brain tissue injury caused by reperfusion of blood flow following a period of ischaemia. GLP-1 is used for metabolic intervention to improve the function of ischaemic and reperfused brain cells. It treats patients after an acute stroke or haemorrhage and tissue damage arising from a medical procedure that is a surgical event causing ischaemia of brain tissue or a medical procedure involving a reperfusion event. GLP-1 is an ideal alternative to insulin for the treatment of stroke as it stimulates endogenous insulin secretion in the presence of normo- to hyperglycaemia but not during hypoglycaemia, thus protecting against the development of severe hypoglycaemia. The treatment optimises insulin secretion, increases brain anabolism, enhancing insulin effectiveness by suppressing glucagon and maintains euglycaemia or mild hypoglycaemia with no risk of severe hypoglycaemia. The present sequence represents a gila monster venom peptide which is homologous to GLP-1, and is given in the exemplification of the present invention.

Sequence 39 AA;

Query Match 100.0%; Score 208; DB 22; Length 39;

Best Local Similarity 100.0%; Pred. No. 9.2e-19;

Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSLSKQMEEEAVRLFIEWLKNKGPPSSGAPPPS 39
|||||

Db 1 HSDGFTSLSKQMEEEAVRLFIEWLKNKGPPSSGAPPPS 39
|||||

Search completed: March 28, 2003, 08:37:20
Job time : 75 secs

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OM protein - protein search, using sw model

Run on: March 28, 2003, 08:36:08 ; Search time 28 seconds
(without alignments)
40.982 Million cell updates/sec

Title: US-09-756-690A-1
Perfect score: 208
Sequence: 1 HSDGFTTSDLSKQMEAEVRLFIWLKNGPSSGAPPPS 39

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues
Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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1: /cgn2.6/prodata/1/1aa/5A.COMB.pap.*
2: /cgn2.6/prodata/1/1aa/5B.COMB.pap.*
3: /cgn2.6/prodata/1/1aa/6A.COMB.pap.*
4: /cgn2.6/prodata/1/1aa/6B.COMB.pap.*
5: /cgn2.6/prodata/1/1aa/PCRTUS.COMB.pap.*
6: /cgn2.6/prodata/1/1aa/backfiles1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	208	100.0	39	1 US-08-066-480-1	Sequence 1, Appl
2	208	100.0	39	4 US-09-302-596-7	Sequence 7, Appl
3	208	100.0	39	4 US-09-623-618B-11	Sequence 11, Appl
4	208	100.0	39	4 US-09-333-415-7	Sequence 7, Appl
5	208	100.0	39	4 US-09-303-016-7	Sequence 7, Appl
6	208	100.0	40	4 US-09-623-618B-19	Sequence 19, Appl
7	208	100.0	40	4 US-09-623-618B-33	Sequence 33, Appl
8	208	100.0	40	4 US-09-623-618B-34	Sequence 34, Appl
9	200	96.2	39	1 US-08-066-480-2	Sequence 2, Appl
10	200	96.2	39	4 US-09-302-596-9	Sequence 9, Appl
11	200	96.2	39	4 US-09-623-618B-12	Sequence 12, Appl
12	200	96.2	39	4 US-09-333-415-9	Sequence 9, Appl
13	200	96.2	39	4 US-09-303-016-9	Sequence 9, Appl
14	200	96.2	40	4 US-09-623-618B-18	Sequence 18, Appl
15	200	96.2	40	4 US-09-623-618B-31	Sequence 31, Appl
16	200	96.2	40	4 US-09-623-618B-32	Sequence 32, Appl
17	164	78.8	31	1 US-08-066-480-5	Sequence 5, Appl
18	164	78.8	31	4 US-09-302-596-8	Sequence 8, Appl
19	164	78.8	31	4 US-09-333-415-8	Sequence 8, Appl
20	164	78.8	31	4 US-09-303-016-8	Sequence 24, Appl
21	160	76.9	31	4 US-09-623-618B-24	Sequence 15, Appl
22	158	76.0	31	4 US-09-623-618B-15	Sequence 3, Appl
23	157	75.5	31	1 US-08-066-480-3	Sequence 35, Appl
24	157	75.5	32	4 US-09-623-618B-35	Sequence 4, Appl
25	150	72.1	31	1 US-08-066-480-4	Sequence 14, Appl
26	150	72.1	31	4 US-09-623-618B-14	Sequence 23, Appl
27	150	72.1	31	4 US-09-623-618B-23	

28	141.5	68.0	31	4	US-09-623-618B-13	Sequence 13, Appl
29	139.5	67.1	31	4	US-09-623-618B-20	Sequence 20, Appl
30	133	63.9	29	4	US-09-623-618B-22	Sequence 22, Appl
31	132.5	63.7	30	4	US-09-623-618B-21	Sequence 21, Appl
32	94.5	45.4	176	2	US-08-835-231-18	Sequence 18, Appl
33	94.5	45.4	176	4	US-09-108-661-18	Sequence 18, Appl
34	90	43.3	31	4	US-09-109-799D-14	Sequence 14, Appl
35	89	42.8	36	2	US-08-836-528-1	Sequence 1, Appl
36	88	42.3	31	1	US-08-062-472B-42	Sequence 42, Appl
37	88	42.3	31	4	US-09-258-750-1	Sequence 1, Appl
38	88	42.3	31	4	US-09-258-750-4	Sequence 4, Appl
39	88	42.3	31	4	US-09-258-750-8	Sequence 8, Appl
40	88	42.3	31	4	US-09-585-181A-1	Sequence 1, Appl
41	88	42.3	31	4	US-09-209-799D-13	Sequence 13, Appl
42	88	42.3	31	4	US-09-398-111-1	Sequence 1, Appl
43	88	42.3	31	4	US-09-398-111-4	Sequence 4, Appl
44	88	42.3	31	4	US-09-398-111-8	Sequence 8, Appl
45	88	42.3	32	4	US-09-261-853-3	Sequence 3, Appl

ALIGNMENTS

RESULT 1
US-08-066-480-1
; Sequence 1, Application US/08066480
; Patent No 5424286
; GENERAL INFORMATION:
; APPLICANT: Eng, John
; TITLE OF INVENTION: Pharmaceutical Compositions And Use of
; TITLE OF INVENTION: Exendin-3 and Exendin-4 for Treatment of Diabetes Mellitu
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Allegretti & Witcoff, Ltd.
; STREET: 10 S. Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/066,480
; FILING DATE: 24-MAR-1993
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: McDonnell, John J
; REGISTRATION NUMBER: 26,949
; REFERENCE/DOCKET NUMBER: 93,084
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-715-1000
; TELEFAX: 312-715-1234
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 39 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..39
; OTHER INFORMATION: /label= Exendin-3
US-08-066-480-1

Query Match 100.0%; Score 208; DB 1; Length 39;
Best Local Similarity 100.0%; Pred. No. 7.1e-20;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HSDGFTTSDLSKQMEAEVRLFIWLKNGPSSGAPPPS 39

Db 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
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RESULT 2

US-09-302-596-7
; Sequence 7, Application US/09302596
; Patent No. 6284725
; GENERAL INFORMATION:
; APPLICANT: Coolidge, Thomas R.
; APPLICANT: Ehlers, Mario R.W.
; TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of
; TITLE OF INVENTION: Ischemic and Reperfused Tissue
; FILE REFERENCE: P03660US1
; CURRENT APPLICATION NUMBER: US/09/302,596
; CURRENT FILING DATE: 1999-04-30
; PRIOR APPLICATION NUMBER: 60/103,498
; PRIOR FILING DATE: 1998-10-08
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 7
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Gila Monster venom
US-09-302-596-7

Query Match 100.0%; Score 208; DB 4; Length 39;
Best Local Similarity 100.0%; Pred. No. 7,1e-20;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
|||||

Db 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
|||||

RESULT 3

US-09-623-618B-11
; Sequence 11, Application US/09623618B
; Patent No. 6329336
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit
; APPLICANT: Ezrin, Alan M.
; APPLICANT: Holmes, Darren L.
; APPLICANT: Leblanc, Anouk
; APPLICANT: St. Pierre, Serge
; TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
; FILE REFERENCE: 500862001620
; CURRENT APPLICATION NUMBER: PCT/US00/13563
; PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: 60/159,783
; PRIOR FILING DATE: 1999-10-15
; PRIOR APPLICATION NUMBER: 60/134,406
; PRIOR FILING DATE: 1999-05-17
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-623-618B-11

Query Match 100.0%; Score 208; DB 4; Length 39;
Best Local Similarity 100.0%; Pred. No. 7,1e-20;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
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Db 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39

RESULT 4

US-09-333-415-7
; Sequence 7, Application US/09333415
; Patent No. 6344180
; GENERAL INFORMATION:
; APPLICANT: Holst, Jens J.
; APPLICANT: Vilsboll, Tina
; TITLE OF INVENTION: GLP-1 as a Diagnostic Test to Determine Beta-Cell
; TITLE OF INVENTION: Function and the Presence of the Condition of IGT and
; TITLE OF INVENTION: Type-II Diabetes
; FILE REFERENCE: P039870US0
; CURRENT APPLICATION NUMBER: US/09/333,415
; CURRENT FILING DATE: 1999-06-15
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 7
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Heloderma suspectum
US-09-333-415-7

Query Match 100.0%; Score 208; DB 4; Length 39;
Best Local Similarity 100.0%; Pred. No. 7,1e-20;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
|||||

Db 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
|||||

RESULT 5

US-09-303-016-7
; Sequence 7, Application US/09303016
; Patent No. 6429197
; GENERAL INFORMATION:
; APPLICANT: Coolidge, Thomas R.
; APPLICANT: Ehlers, Mario R.W.
; TITLE OF INVENTION: Metabolic Intervention with GLP-1 or its Biologically
; TITLE OF INVENTION: Active Analogues to Improve the Function of the
; TITLE OF INVENTION: Ischemic and Reperfused Brain
; FILE REFERENCE: P03660US2
; CURRENT APPLICATION NUMBER: US/09/303,016
; CURRENT FILING DATE: 1999-04-30
; PRIOR APPLICATION NUMBER: 60/103,498
; PRIOR FILING DATE: 1998-10-08
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 7
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Heloderma suspectum
US-09-303-016-7

Query Match 100.0%; Score 208; DB 4; Length 39;
Best Local Similarity 100.0%; Pred. No. 7,1e-20;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
|||||

Db 1 HSDGTFSDLSKQMEEAARLFIWLKNGPSSGAPPPS 39
|||||

RESULT 6

US-09-623-618B-19
; Sequence 19, Application US/09623618B
; Patent No. 6329336
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit
; APPLICANT: Ezrin, Alan M.

APPLICANT: Holmes, Darren L.
 APPLICANT: Leblanc, Anouk
 APPLICANT: St. Pierre, Serge
 TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
 FILE REFERENCE: 500862001620
 CURRENT APPLICATION NUMBER: US/09/623,618B
 CURRENT FILING DATE: 2000-09-05
 PRIOR APPLICATION NUMBER: PCT/US00/13563
 PRIOR FILING DATE: 2000-05-17
 PRIOR APPLICATION NUMBER: 60/159,783
 PRIOR FILING DATE: 1999-10-15
 PRIOR APPLICATION NUMBER: 60/134,406
 PRIOR FILING DATE: 1999-05-17
 NUMBER OF SEQ ID NOS: 35
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 19
 LENGTH: 40
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 OTHER INFORMATION: Peptide
 US-09-623-618B-19

Query Match 100.0%; Score 208; DB 4; Length 40;
 Best Local Similarity 100.0%; Pred. No. 7.4e-20;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39
 Db 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39

RESULT 7

US-09-623-618B-33
 Sequence 33, Application US/09623618B
 Patent No. 6329336
 GENERAL INFORMATION:
 APPLICANT: Bridon, Dominique P.
 APPLICANT: L'Archeveque, Benoit
 APPLICANT: Ezrin, Alan M.
 APPLICANT: Holmes, Darren L.
 APPLICANT: Leblanc, Anouk
 APPLICANT: St. Pierre, Serge
 TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
 FILE REFERENCE: 500862001620
 CURRENT APPLICATION NUMBER: US/09/623,618B
 CURRENT FILING DATE: 2000-09-05
 PRIOR APPLICATION NUMBER: PCT/US00/13563
 PRIOR FILING DATE: 2000-05-17
 PRIOR APPLICATION NUMBER: 60/159,783
 PRIOR FILING DATE: 1999-10-15
 PRIOR APPLICATION NUMBER: 60/134,406
 PRIOR FILING DATE: 1999-05-17
 NUMBER OF SEQ ID NOS: 35
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 33
 LENGTH: 40
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 OTHER INFORMATION: Peptide
 NAME/KEY: MOD_RES
 LOCATION: 40
 OTHER INFORMATION: Xaa represents Lys(E-MPA)-NH2-5TFA and where "E" represents Epsil

Query Match 100.0%; Score 208; DB 4; Length 40;
 Best Local Similarity 100.0%; Pred. No. 7.4e-20;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39

Db 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39

RESULT 8

US-09-623-618B-34
 Sequence 34, Application US/09623618B
 Patent No. 6329336
 GENERAL INFORMATION:
 APPLICANT: Bridon, Dominique P.
 APPLICANT: L'Archeveque, Benoit
 APPLICANT: Ezrin, Alan M.
 APPLICANT: Holmes, Darren L.
 APPLICANT: Leblanc, Anouk
 APPLICANT: St. Pierre, Serge
 TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
 FILE REFERENCE: 500862001620
 CURRENT APPLICATION NUMBER: US/09/623,618B
 CURRENT FILING DATE: 2000-09-05
 PRIOR APPLICATION NUMBER: PCT/US00/13563
 PRIOR FILING DATE: 2000-05-17
 PRIOR APPLICATION NUMBER: 60/159,783
 PRIOR FILING DATE: 1999-10-15
 PRIOR APPLICATION NUMBER: 60/134,406
 PRIOR FILING DATE: 1999-05-17
 NUMBER OF SEQ ID NOS: 35
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 34
 LENGTH: 40
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 OTHER INFORMATION: Peptide
 NAME/KEY: MOD_RES
 LOCATION: 33
 OTHER INFORMATION: Xaa represents Lys(E-AEEA-AEEA-MPA)-NH2-5TFA and where "E" r

US-09-623-618B-34
 Query Match 100.0%; Score 208; DB 4; Length 40;
 Best Local Similarity 100.0%; Pred. No. 7.4e-20;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39
 Db 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39

RESULT 9

US-08-066-480-2
 Sequence 2, Application US/08066480
 Patent No. 5424286
 GENERAL INFORMATION:
 APPLICANT: Eng, John
 TITLE OF INVENTION: Pharmaceutical Compositions And Use of
 CURRENT APPLICATION NUMBER: US/08/066,480
 CURRENT FILING DATE: 2000-05-17
 PRIOR APPLICATION NUMBER: 60/134,406
 PRIOR FILING DATE: 1999-05-17
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 33
 LENGTH: 40
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 OTHER INFORMATION: Peptide
 NAME/KEY: MOD_RES
 LOCATION: 40
 OTHER INFORMATION: Xaa represents Lys(E-MPA)-NH2-5TFA and where "E" represents Epsil

Query Match 100.0%; Score 208; DB 4; Length 40;
 Best Local Similarity 100.0%; Pred. No. 7.4e-20;
 Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEAARVLFIEWLKNKGPGSSGAPPPS 39

```

; ATTORNEY/AGENT INFORMATION:
; NAME: McDonnell, John J
; REGISTRATION NUMBER: 26,949
; REFERENCE/DOCKET NUMBER: 93,084
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-715-1000
; TELEFAX: 312-715-1234
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 39 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..39
; OTHER INFORMATION: /label= Exendin-4
;
US-08-066-480-2

Query Match 96.2%; Score 200; DB 1; Length 39;
Best Local Similarity 94.9%; Pred. No. 7.4e-19;
Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
| :|||||
Db 1 HGEGETSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
| :|||||

RESULT 10
US-09-302-596-9
; Sequence 9, Application US/09302596
; Patent No. 6284725
; GENERAL INFORMATION:
; APPLICANT: Coolidge, Thomas R.
; APPLICANT: Ehlers, Mario R.W.
; TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of
; TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of
; TITLE OF INVENTION: Ischemic and Reperfusion Tissue
; FILE REFERENCE: P03660051
; CURRENT APPLICATION NUMBER: US/09/302,596
; CURRENT FILING DATE: 1999-04-30
; PRIOR APPLICATION NUMBER: 60/103,498
; PRIOR FILING DATE: 1998-10-08
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 9
; TYPE: PRT
; ORGANISM: Gila Monster venom
;
US-09-302-596-9

Query Match 96.2%; Score 200; DB 4; Length 39;
Best Local Similarity 94.9%; Pred. No. 7.4e-19;
Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
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Db 1 HGEGETSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
| :|||||

RESULT 11
US-09-623-618B-12
; Sequence 12, Application US/09623618B
; Patent No. 6329336
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit
; APPLICANT: Ezrin, Alan M.
; APPLICANT: Holmes, Darren L.
; APPLICANT: Leblanc, Anouk
; APPLICANT: St. Pierre, Serge
; TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
; FILE REFERENCE: 500862001620

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; CURRENT APPLICATION NUMBER: US/09/623,618B
; CURRENT FILING DATE: 2000-09-05
; PRIOR APPLICATION NUMBER: PCT/US00/13563
; PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: 60/159,783
; PRIOR FILING DATE: 1999-10-15
; PRIOR APPLICATION NUMBER: 60/134,406
; PRIOR FILING DATE: 1999-05-17
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
;
US-09-623-618B-12

Query Match 96.2%; Score 200; DB 4; Length 39;
Best Local Similarity 94.9%; Pred. No. 7.4e-19;
Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
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Db 1 HGEGETSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
| :|||||

RESULT 12
US-09-333-415-9
; Sequence 9, Application US/09333415
; Patent No. 6344180
; GENERAL INFORMATION:
; APPLICANT: Hoist, Jens J.
; APPLICANT: Vilisboll, Tina
; TITLE OF INVENTION: GLP-1 as a Diagnostic Test to Determine Beta-Cell
; TITLE OF INVENTION: Function and the Presence of the Condition of IGT and
; TITLE OF INVENTION: Type-II Diabetes
; FILE REFERENCE: P03987US0
; CURRENT APPLICATION NUMBER: US/09/333,415
; CURRENT FILING DATE: 1999-06-15
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 9
; TYPE: PRT
; ORGANISM: Heloderma suspectum
;
US-09-333-415-9

Query Match 96.2%; Score 200; DB 4; Length 39;
Best Local Similarity 94.9%; Pred. No. 7.4e-19;
Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
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Db 1 HGEGETSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
| :|||||

RESULT 13
US-09-303-016-9
; Sequence 9, Application US/09303016
; Patent No. 6429197
; GENERAL INFORMATION:
; APPLICANT: Coolidge, Thomas R.
; APPLICANT: Ehlers, Mario R.W.
; TITLE OF INVENTION: Metabolic Intervention with GLP-1 or its Biologically
; TITLE OF INVENTION: Active Analogues to Improve the Function of the
; TITLE OF INVENTION: Ischemic and Reperfusion Brain
; FILE REFERENCE: P03660052
; CURRENT APPLICATION NUMBER: US/09/303,016
; CURRENT FILING DATE: 1999-04-30
; PRIOR APPLICATION NUMBER: 60/103,498
; PRIOR FILING DATE: 1998-10-08

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NUMBER OF SEQ ID NOS: 13
 SOFTWARE: Patentin Ver. 2.0
 SEQ ID NO 9
 LENGTH: 39
 TYPE: PRT
 ORGANISM: Heloderma suspectum
 US-09-303-016-9

Query Match 96.2%; Score 200; DB 4; Length 39;
 Best Local Similarity 94.9%; Pred. No. 7.4e-19;
 Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 HSDGTFSDLSKQMEEEAVRLFIWLKNGPSSGAPPPS 39
 Db 1 HGEGETTSDLSKQMEEEAVRLFIWLKNGPSSGAPPPS 39

RESULT 14

US-09-623-618B-18
 Sequence 18, Application US/09623618B
 Patent No. 6329336

GENERAL INFORMATION:
 APPLICANT: Bridon, Dominique P.
 APPLICANT: L'Archeveque, Benoit
 APPLICANT: Ezrin, Alan M.
 APPLICANT: Holmes, Darren L.
 APPLICANT: Leblanc, Anouk
 APPLICANT: St. Pierre, Serge

TITLE OF INVENTION: LONG-LASTING INSULINOTROPIC PEPTIDES
 FILE REFERENCE: 500862001620
 CURRENT APPLICATION NUMBER: US/09/623,618B
 CURRENT FILING DATE: 2000-09-05
 PRIOR APPLICATION NUMBER: PCT/US00/13563
 PRIOR FILING DATE: 2000-05-17
 PRIOR APPLICATION NUMBER: 60/159,783
 PRIOR FILING DATE: 1999-10-15
 PRIOR APPLICATION NUMBER: 60/134,406
 PRIOR FILING DATE: 1999-05-17
 NUMBER OF SEQ ID NOS: 35
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 18
 LENGTH: 40
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 OTHER INFORMATION: Peptide

US-09-623-618B-18

Query Match 96.2%; Score 200; DB 4; Length 40;
 Best Local Similarity 94.9%; Pred. No. 7.6e-19;
 Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEEAVRLFIWLKNGPSSGAPPPS 39
 Db 1 HGEGETTSDLSKQMEEEAVRLFIWLKNGPSSGAPPPS 39

RESULT 15

US-09-623-618B-31
 Sequence 31, Application US/09623618B
 Patent No. 6329336

GENERAL INFORMATION:
 APPLICANT: Bridon, Dominique P.
 APPLICANT: L'Archeveque, Benoit
 APPLICANT: Ezrin, Alan M.
 APPLICANT: Holmes, Darren L.
 APPLICANT: Leblanc, Anouk
 APPLICANT: St. Pierre, Serge

TITLE OF INVENTION: LONG-LASTING INSULINOTROPIC PEPTIDES
 FILE REFERENCE: 500862001620
 CURRENT APPLICATION NUMBER: US/09/623,618B
 CURRENT FILING DATE: 2000-09-05

PRIOR APPLICATION NUMBER: PCT/US00/13563
 PRIOR FILING DATE: 2000-05-17
 PRIOR APPLICATION NUMBER: 60/159,783
 PRIOR FILING DATE: 1999-10-15
 PRIOR APPLICATION NUMBER: 60/134,406
 PRIOR FILING DATE: 1999-05-17
 NUMBER OF SEQ ID NOS: 35
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 31
 LENGTH: 40
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 OTHER INFORMATION: Peptide
 NAME/KEY: MOD_RES
 LOCATION: 40
 OTHER INFORMATION: Xaa represents Lys(E-WPA)-NH2-STFA and where "E" represents

US-09-623-618B-31

Query Match 96.2%; Score 200; DB 4; Length 40;
 Best Local Similarity 94.9%; Pred. No. 7.6e-19;
 Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEEEAVRLFIWLKNGPSSGAPPPS 39
 Db 1 HGEGETTSDLSKQMEEEAVRLFIWLKNGPSSGAPPPS 39

Search completed: March 28, 2003, 08:40:49
 Job time : 29 secs

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on 28 March 28, 2003, 08:37:28 : Search time 14 Seconds
(without alignments)
163.587 Million cell updates/sec

Title: US-09-756-690A-1

Perfect score: 208
Sequence: 1 HSDGTTSDLSKQMEAEAVRLFIEWLKNGPSSGAPPPS 39

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Gapop 10.0 , Gapext 0.5

Searched: 237916 seqs, 58723674 residues

Total number of hits satisfying chosen parameters: 237916

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
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- 9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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2	208	100.0	39	10	US-09-876-388-11
3	208	100.0	39	10	US-09-851-738-7
4	208	100.0	39	10	US-09-805-507-7
5	208	100.0	39	10	US-09-859-804-7
6	208	100.0	39	10	US-09-003-869-1
7	208	100.0	39	10	US-09-982-978-7
8	208	100.0	39	10	US-09-953-021B-7
9	208	100.0	40	10	US-09-876-388-19
10	208	100.0	40	10	US-09-876-388-33
11	208	100.0	40	10	US-09-876-388-34
12	204	98.1	39	9	US-09-756-690A-14
13	204	98.1	39	10	US-09-003-869-14
14	200	96.2	39	9	US-09-756-690A-2
15	200	96.2	39	10	US-09-876-388-12
16	200	96.2	39	10	US-09-851-738-9
17	200	96.2	39	10	US-09-805-507-9
18	200	96.2	39	10	US-09-859-804-9
19	200	96.2	39	10	US-09-003-869-2

20	200	96.2	39	10	US-09-982-978-9	Sequence 9, Appli
21	200	96.2	39	10	US-09-953-021B-9	Sequence 9, Appli
22	200	96.2	40	10	US-09-876-388-18	Sequence 18, Appl
23	200	96.2	40	10	US-09-876-388-31	Sequence 31, Appl
24	200	96.2	40	10	US-09-876-388-32	Sequence 32, Appl
25	199	95.7	39	9	US-09-756-690A-25	Sequence 25, Appl
26	199	95.7	39	10	US-09-003-869-25	Sequence 25, Appl
27	197	94.7	39	9	US-09-756-690A-10	Sequence 10, Appl
28	197	94.7	39	9	US-09-756-690A-18	Sequence 18, Appl
29	197	94.7	39	9	US-09-756-690A-29	Sequence 29, Appl
30	197	94.7	39	10	US-09-003-869-18	Sequence 18, Appl
31	197	94.7	39	10	US-09-003-869-29	Sequence 29, Appl
32	197	94.7	39	10	US-09-003-869-13	Sequence 13, Appl
33	196	94.2	38	9	US-09-756-690A-62	Sequence 62, Appl
34	196	94.2	38	10	US-09-003-869-62	Sequence 62, Appl
35	196	94.2	39	9	US-09-756-690A-13	Sequence 13, Appl
36	196	94.2	39	9	US-09-756-690A-16	Sequence 16, Appl
37	196	94.2	39	9	US-09-756-690A-19	Sequence 19, Appl
38	196	94.2	39	10	US-09-003-869-13	Sequence 13, Appl
39	196	94.2	39	10	US-09-003-869-16	Sequence 16, Appl
40	196	94.2	39	10	US-09-003-869-19	Sequence 19, Appl
41	195	93.8	39	9	US-09-756-690A-20	Sequence 20, Appl
42	195	93.8	39	9	US-09-756-690A-27	Sequence 27, Appl
43	195	93.8	39	10	US-09-003-869-20	Sequence 20, Appl
44	195	93.8	39	10	US-09-003-869-27	Sequence 27, Appl
45	194	93.3	39	9	US-09-756-690A-12	Sequence 12, Appl

ALIGNMENTS

RESULT 1

US-09-756-690A-1
; Publication No. US2003036504A1
; GENERAL INFORMATION:
; APPLICANT: KOLTERMAN, ORVILLE G.
; APPLICANT: YOUNG, ANDREW A.
; TITLE OF INVENTION: USE OF EXENDINS AND AGONISTS THEREOF FOR MODULATION OF
; TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA
; FILE REFERENCE: 249/124
; CURRENT APPLICATION NUMBER: US/09/756,690A
; PRIOR FILING DATE: 2002-04-19
; PRIOR FILING DATE: 2000-01-10
; NUMBER OF SEQ ID NOS: 188
; SOFTWARE: PatentIn Ver 2.1
; SEQ ID NO 1
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Heloderma horridum
; FEATURE:
; OTHER INFORMATION: Exendin-3
; FEATURE:
; OTHER INFORMATION: c-term amidation
US-09-756-690A-1

Query Match 100.0%; Score 208; DB 9; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HSDGTTSDLSKQMEAEAVRLFIEWLKNGPSSGAPPPS 39
|||||
DB 1 HSDGTTSDLSKQMEAEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 2

US-09-876-388-11
; Sequence 11, Application US/09876388
; Patent No. US20020049153A1
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit

APPLICANT: Ezrin, Alan M.
APPLICANT: Holmes, Darren L.
APPLICANT: Leblanc, Anouk
APPLICANT: St. Pierre, Serge
TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
FILE REFERENCE: 500862001610
CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 09/623,618
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: PCT/US00/13563
PRIOR FILING DATE: 2000-05-17
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-15
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 11
LENGTH: 39
TYPE: PPT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: Peptide
US-09-876-388-11

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
|||||
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 3

US-09-851-738-7
Sequence 7, Application US/09851738
Patent No. US20020055460A1
GENERAL INFORMATION:
APPLICANT: Coolidge, Thomas R.
APPLICANT: Ehlers, Mario R.W.
TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of
TITLE OF INVENTION: Ischemic and Reperfused Tissue
FILE REFERENCE: P03660U51
CURRENT APPLICATION NUMBER: US/09/851,738
CURRENT FILING DATE: 2001-05-09
PRIOR APPLICATION NUMBER: 09/302,596
PRIOR FILING DATE: 1999-04-30
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 39
TYPE: PPT
ORGANISM: Gila Monster venom
US-09-851-738-7

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
|||||
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 4

US-09-805-507-7
Sequence 7, Application US/09805507
Patent No. US20020098195A1
GENERAL INFORMATION:
APPLICANT: COOLIDGE, THOMAS R.

APPLICANT: EHLERS, MARIO
TITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FILE REFERENCE: 089187/0395
CURRENT APPLICATION NUMBER: US/09/805,507
CURRENT FILING DATE: 2001-03-14
PRIOR APPLICATION NUMBER: 09/859,804
PRIOR FILING DATE: 2001-05-18
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 7
LENGTH: 39
TYPE: PPT
ORGANISM: Unknown Organism
FEATURE:
OTHER INFORMATION: Description of Unknown Organism: Exendrin 3
US-09-805-507-7

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
|||||
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 5

US-09-859-804-7
Sequence 7, Application US/09859804
Patent No. US20020107206A1
GENERAL INFORMATION:
APPLICANT: COOLIDGE, THOMAS R.
APPLICANT: EHLERS, MARIO
TITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FILE REFERENCE: 089187/0395
CURRENT APPLICATION NUMBER: US/09/859,804
CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 60/205,239
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 7
LENGTH: 39
TYPE: PPT
ORGANISM: Unknown Organism
FEATURE:
OTHER INFORMATION: Description of Unknown Organism: Exendrin 3
US-09-859-804-7

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
|||||
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 6

US-09-003-869-1
Sequence 1, Application US/09003869A
Patent No. US20020137666A1
GENERAL INFORMATION:
APPLICANT: BEELEY, NIGEL ROBERT ARNOLD
APPLICANT: PRICKETT, KATHRYN S.
APPLICANT: BHAVSAR, SUNIL
TITLE OF INVENTION: USE OF EXENDINS AND AGONISTS THEREOF FOR
TITLE OF INVENTION: THE REDUCTION OF FOOD INTAKE
FILE REFERENCE: 231/181
CURRENT APPLICATION NUMBER: US/09/003,869A
CURRENT FILING DATE: 1998-01-07
EARLIER APPLICATION NUMBER: US 60/034,905
EARLIER FILING DATE: 1997-01-07

; EARLIER APPLICATION NUMBER: US 60/055,404
; EARLIER FILING DATE: 1997-08-08
; EARLIER APPLICATION NUMBER: US 60/065,442
; EARLIER FILING DATE: 1997-11-14
; EARLIER APPLICATION NUMBER: US 60/066,029
; EARLIER FILING DATE: 1997-11-14
; NUMBER OF SEQ ID NOS: 188
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Heloderma horridum
; FEATURE:
; NAME/KEY: AMIDATION
; LOCATION: (39)...(39)
; OTHER INFORMATION: amidated Ser (Serinamide)
US-09-003-869-1

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 7
US-09-982-978-7
; Sequence 7, Application US/09982978
; Patent No. US20020146405A1
; GENERAL INFORMATION:
; APPLICANT: COOLIDGE, THOMAS R.
; APPLICANT: EHLERS, MARIO
; TITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
; FILE REFERENCE: 089187/0395
; CURRENT FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US/09/982,978
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 09/859,804
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: 60/205,239
; PRIOR FILING DATE: 2000-05-19
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 7
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Exendrin 3
US-09-982-978-7

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 8
US-09-953-021B-7
; Sequence 7, Application US/09953021B
; Patent No. US20020147131A1
; GENERAL INFORMATION:
; APPLICANT: Coolidge, Thomas L.
; APPLICANT: Ehlers, Mario R.W.
; TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of Isch
; TITLE OF INVENTION: Reparified Skeletal Muscle Tissue
; FILE REFERENCE: P03660U6
; CURRENT APPLICATION NUMBER: US/09/953.021B
; CURRENT FILING DATE: 2001-09-11

; PRIOR APPLICATION NUMBER: 09/302,596
; PRIOR FILING DATE: 1999-04-30
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 7
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Heloderma suspectum
US-09-953-021B-7

Query Match 100.0%; Score 208; DB 10; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 9
US-09-876-388-19
; Sequence 19, Application US/09876388
; Patent No. US20020049153A1
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit
; APPLICANT: Ezrin, Alan M.
; APPLICANT: Holmes, Darren L.
; APPLICANT: Leblanc, Anouk
; APPLICANT: St. Pierre, Serge
; TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
; FILE REFERENCE: 500862001610
; CURRENT APPLICATION NUMBER: US/09/876,388
; CURRENT FILING DATE: 2001-09-24
; PRIOR APPLICATION NUMBER: 09/623,618
; PRIOR FILING DATE: 2000-09-05
; PRIOR APPLICATION NUMBER: PCT/US00/13563
; PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: 60/159,783
; PRIOR FILING DATE: 1999-10-15
; PRIOR APPLICATION NUMBER: 60/134,406
; PRIOR FILING DATE: 1999-05-17
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 19
; LENGTH: 40
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic Peptide
US-09-876-388-19

Query Match 100.0%; Score 208; DB 10; Length 40;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39
DB 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGPSSGAPPPS 39

RESULT 10
US-09-876-388-33
; Sequence 33, Application US/09876388
; Patent No. US20020049153A1
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit
; APPLICANT: Ezrin, Alan M.
; APPLICANT: Holmes, Darren L.
; APPLICANT: Leblanc, Anouk
; APPLICANT: St. Pierre, Serge

us-09-756-690a-1.rapb

Fri Mar 28 12:12:49 2003

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; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
US-09-876-388-12

Query Match      96.2%; Score 200; DB 10; Length 39;
Best Local Similarity 94.9%; Pred. No. 1.4e-18;
Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGGPGSSGAPPS 39
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Db 1 HGEFTSDLSKQMEEEAVRLFIEWLKNGGPGSSGAPPS 39
    | : ||||| ||||| ||||| ||||| ||||| ||||| |||||

Search completed: March 28, 2003, 08:41:09
Job time : 15 secs

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; FEATURE:
; NAME/KEY: AMIDATION
; LOCATION: (39)...(39)
; OTHER INFORMATION: amidated Ser (Serinamide)
US-09-003-869-14

Query Match      98.1%; Score 204; DB 10; Length 39;
Best Local Similarity 97.4%; Pred. No. 4.5e-19;
Matches 38; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGGPGSSGAPPS 39
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Db 1 HGDGFTSDLSKQMEEEAVRLFIEWLKNGGPGSSGAPPS 39
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RESULT 14
US-09-756-690A-2
; Sequence 2, Application US/09756690A
; Publication No. US2003036504A1
; GENERAL INFORMATION:
; APPLICANT: KOLTERMAN, ORVILLE G.
; APPLICANT: YOUNG, ANDREW A.
; TITLE OF INVENTION: USE OF EXENDINS AND AGONISTS THEREOF FOR MODULATION OF
; TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA
; FILE REFERENCE: 249/124
; CURRENT APPLICATION NUMBER: US/09/756,690A
; CURRENT FILING DATE: 2002-04-19
; PRIOR APPLICATION NUMBER: 60/175,365
; PRIOR FILING DATE: 2000-01-10
; NUMBER OF SEQ ID NOS: 188
; SOFTWARE: PatentIn Ver 2.1
; SEQ ID NO 2
; LENGTH: 39
; TYPE: PRT
; ORGANISM: Heloderma suspectum
; FEATURE:
; OTHER INFORMATION: Exendin-4
; FEATURE:
; OTHER INFORMATION: c-term amidation
US-09-756-690A-2

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Query Match      96.2%; Score 200; DB 9; Length 39;
Best Local Similarity 94.9%; Pred. No. 1.4e-18;
Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSDGFTSDLSKQMEEEAVRLFIEWLKNGGPGSSGAPPS 39
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Db 1 HGEFTSDLSKQMEEEAVRLFIEWLKNGGPGSSGAPPS 39
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RESULT 15
US-09-876-388-12
; Sequence 12, Application US/09876388
; Patent No. US20020049153A1
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: L'Archeveque, Benoit
; APPLICANT: Ezrin, Alan M.
; APPLICANT: Holmes, Darren L.
; APPLICANT: Leblanc, Anouk
; APPLICANT: St. Pierre, Serge
; TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
; FILE REFERENCE: 500862001510
; CURRENT APPLICATION NUMBER: US/09/876,388
; CURRENT FILING DATE: 2001-09-24
; PRIOR APPLICATION NUMBER: 09/623,618
; PRIOR FILING DATE: 2000-09-05
; PRIOR APPLICATION NUMBER: PCT/US00/13563
; PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: 60/159,783
; PRIOR FILING DATE: 1999-10-15
; PRIOR APPLICATION NUMBER: 60/134,406
; PRIOR FILING DATE: 1999-03-17

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QY 1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29

C;Keywords: duplication; normone; pancreas
F:1-30/Product: glucagon-like peptide #status predicted <MAT>

QY 1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29

Db 1 HADGTYTSDASSELQEAARDFISWLKKG 29
 :|||:||||| :|||:|||||

RESULT 8

GCGXA

glucagon precursor - alligator gar (fragment)
 N;Alternate names: oxyntomodulin
 C;Species: Lepisosteus spatula (alligator gar)
 C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998
 C;Accession: S06871
 R;Pollock, H.G.; Kimmel, J.R.; Ebner, K.E.; Hamblton, J.W.; Rouse, J.B.; Lance, V.; Rave
 Gen. Comp. Endocrinol. 69, 133-140, 1988
 A;Title: Isolation of alligator gar (Lepisosteus spatula) glucagon, oxyntomodulin, and g
 A;Reference number: S06339; MUID:88196798; PMID:3282974
 A;Accession: S06339
 A;Molecule type: protein
 A;Residues: 1-36 <POL>
 A;Accession: S06871
 A;Molecule type: protein
 A;Residues: 39-72 <PO2>
 C;Comment: X's at positions 37-38 represent a pair of basic amino acids forming a cleava
 C;Superfamily: glucagon
 C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas
 F;1-36/Product: glucagon-36 (oxyntomodulin) #status experimental <G36>
 F;1-29/Product: glucagon #status predicted <GCN>
 F;39-70/Product: glucagon-like peptide 1 #status predicted <GLI>

Query Match 45.2%; Score 94; DB 1; Length 72;
 Best Local Similarity 48.3%; Pred. No. 0.0001;
 Matches 14; Conservative 9; Mismatches 6; Indels 0; Gaps 0;

QY 1 HSDGFTSLSKQMEAEAVRLFIEWLKNG 29
 :|||:||||| :|||:|||||

Db 39 HADGTYTSDVSSYLQDOAAKRFVTLKQG 67

RESULT 9

I51093

glucagon - chinook salmon (fragment)
 C;Species: Oncorhynchus tshawytscha (chinook salmon)
 C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
 C;Accession: I51093
 R;Irwin, D.M.; Wong, J.
 Mol. Endocrinol. 9, 267-277, 1995
 A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcripts
 A;Reference number: A55895; MUID:95295739; PMID:7776976
 A;Accession: I51093
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: mRNA
 A;Residues: 1-66 <IRW>
 A;Cross-references: EMBL:U19920; NID:g736366; PIDN:AAC59670.1; PID:g736367
 C;Superfamily: glucagon
 C;Keywords: duplication

Query Match 44.7%; Score 93; DB 2; Length 66;
 Best Local Similarity 48.3%; Pred. No. 0.00012;
 Matches 14; Conservative 10; Mismatches 5; Indels 0; Gaps 0;

QY 1 HSDGFTSLSKQMEAEAVRLFIEWLKNG 29
 :|||:||||| :|||:|||||

Db 33 HADGTYTSDVSTYLQDOAAKDFVSWLKG 61

RESULT 10

I51058

glucagon I precursor - rainbow trout
 C;Species: Oncorhynchus mykiss (rainbow trout)
 C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
 C;Accession: I51058; MUID:95295739; PMID:7776976
 R;Irwin, D.M.; Wong, J.
 Mol. Endocrinol. 9, 267-277, 1995

A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcr
 A;Reference number: A55895; MUID:95295739; PMID:7776976
 A;Accession: I51058
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: mRNA
 A;Residues: 1-178 <IRW>
 A;Cross-references: EMBL:U19917; NID:g736364; PIDN:AAC59669.1; PID:g736365; GB:S784

A;Accession: I51299
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: mRNA
 A;Residues: 52-53, 'X', 55-123 <IR2>
 A;Cross-references: GB:S78473; NID:g999382; PIDN:AAB34504.1; PID:g999383
 A;Accession: I51056
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: mRNA
 A;Residues: 58-123 <IR3>
 A;Cross-references: EMBL:U19913; NID:g736360; PIDN:AAC59667.1; PID:g736361
 A;Accession: I51037
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 'W', 114-144 <IR4>
 A;Cross-references: EMBL:U19919; NID:g736374; PIDN:AAC60213.1; PID:g736377
 A;Accession: I51036
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 113-123 <IR5>
 A;Cross-references: EMBL:U19918; NID:g736373; PIDN:AAC60212.1; PID:g736376
 C;Genetics:
 A;Introns: 123/2
 C;Superfamily: glucagon
 C;Keywords: duplication

Query Match 44.7%; Score 93; DB 2; Length 178;
 Best Local Similarity 48.3%; Pred. No. 0.00036;
 Matches 14; Conservative 10; Mismatches 5; Indels 0; Gaps 0;

QY 1 HSDGFTSLSKQMEAEAVRLFIEWLKNG 29
 :|||:||||| :|||:|||||

Db 90 HADGTYTSDVSTYLQDOAAKDFVSWLKG 118

RESULT 11

I51057

glucagon II precursor - rainbow trout
 C;Species: Oncorhynchus mykiss (rainbow trout)
 C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
 C;Accession: I51057; I51039; I51038
 R;Irwin, D.M.; Wong, J.
 Mol. Endocrinol. 9, 267-277, 1995
 A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcr
 A;Reference number: A55895; MUID:95295739; PMID:7776976
 A;Accession: I51057
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: mRNA
 A;Residues: 1-178 <IRW>
 A;Cross-references: EMBL:U19914; NID:g736362; PIDN:AAC59668.1; PID:g736363
 A;Accession: I51039
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 113-144 <IR2>
 A;Cross-references: EMBL:U19916; NID:g736369; PIDN:AAC60210.1; PID:g736372
 A;Accession: I51038
 A;Status: preliminary; translated from GB/EMBL/DBJ
 A;Molecule type: DNA
 A;Residues: 113-123 <IR3>
 A;Cross-references: EMBL:U19915; NID:g736368; PIDN:AAC60209.1; PID:g736371
 C;Genetics:
 A;Introns: 123/2
 C;Superfamily: glucagon
 C;Keywords: duplication

Query Match 44.7%; Score 93; DB 2; Length 178;
 Best Local Similarity 48.3%; Pred. No. 0.00036;
 Matches 14; Conservative 10; Mismatches 5; Indels 0; Gaps 0;

QY 1 HSDGFTSLSKQMEAEAVRLFIEWLKNG 29
 :|||:||||| :|||:|||||

Db 90 HADGTYTSDVSTYLQDOAAKDFVSWLKG 118

A;title: The primary structure of glucagon-like peptide but not insulin has been conserved in the vertebrate lineage
A;reference number: A61125; MUID: 91340066; PMID:1874385
A;accession: C61125
A;molecule type: protein
A;residues: 1-30 <CON>
C;superfamily: glucagon
F;1-30/Product: glucagon-like peptide #status experimental <GLP>
F;1-30/Modified site: amidated carboxyl end (Arg) #status experimental

```

RESULT 15
GCDF
glucagon - smaller spotted catshark
C:Species: Scyllorhinus canicula (smaller spotted catshark)
C:Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 20-Mar-1998
C:Accession: A26992
R:Conlon, J.M.; O'Toole, L.; Thim, L.
FEBS Lett. 214, 50-56, 1987
A:Title: Primary structure of glucagon from the common dogfish (Scyllorhinus canicula)
X:Reference number: A26992; PMID:87190953; PMID:3569517

```

A:Accession: A26992
 A:Molecule type: protein
 C:Residues: 1-29 <CON>
 C:Superfamily: glucagon
 C:Keywords: carbohydrate metabolism; duplication; hormone; intestine; pancreas

Query Match	42.3%	Score 88;	DB 1;	Length 29;
Best Local Similarity	53.6%;	Pred. No. 0.00021;		
Matches	15;	Conservative	8;	Indels 0;
		Mismatches	5;	Gaps 0;

```

QY 1 HSDGTFSDLSKQMEEEAVRLFIEWLKN 28
   ||||||| | : |||||
Db 1 HSEGTSDYSKYMDNRRRAKDFVQWMLN 28

Search completed: March 28, 2003, 08:40:13
Job time : 43 secs

```

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on: March 28, 2003, 08:25:52 ; Search time 25 Seconds
(without alignments)
64,703 Million cell updates/sec

Title: US-09-756-690A-1
Perfect score: 208
Sequence: 1 HSDGFTSLSKQMEAEVRLFIWLKNGGSSGAPPPS 39

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_40.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	208	100.0	39	1 EXE3_HELHO	P20394 heloderma h
2	200	96.2	87	1 EXE4_HELHU	P26349 heloderma s
3	102	49.0	71	1 GLUC_ICTPU	P04093 ictalurus p
4	102	49.0	103	1 GLUC_RANCA	P15438 rana catesb
5	98	47.1	71	1 GLUC_PIAME	P81880 piaractus m
6	94	45.2	78	1 GLUC_LEPSP	P09566 lepisosteus
7	91	43.8	121	1 GLUC_CARAU	P79695 carassius a
8	91	43.8	121	1 GLUC_LOPAM	P04092 lophius ame
9	90	43.3	30	1 GLUC_ANGAN	P41521 anguilla an
10	88	42.3	29	1 GLUC_SCYCA	P09687 scyllorhinu
11	88	42.3	68	1 GLUC_ONCKI	P07449 oncorhynch
12	86	41.3	151	1 GLUC_CHICK	P01277 gallus gall
13	85	40.9	29	1 GLUC_PLAFE	P23062 platichthys
14	85	40.9	29	1 GLUC_TORMA	P09567 torpedo mar
15	85	40.9	96	1 GLUC_MYOSC	P09686 myoxocephal
16	85	40.9	158	1 GLUC_PIG	P01274 sus scrofa
17	85	40.9	180	1 GLUC_BOVIN	P01272 bos taurus
18	85	40.9	180	1 GLUC_CAVPO	P05110 cavia porce
19	85	40.9	180	1 GLUC_HUMAN	P01275 homo sapien
20	85	40.9	180	1 GLUC_MESAU	P01273 mesocricetu
21	85	40.9	180	1 GLUC_MOUSE	P55095 mus musculu
22	85	40.9	180	1 GLUC_OCTDE	P22890 octodon deg
23	85	40.9	180	1 GLUC_RAT	P06883 rattus norv
24	84	40.4	36	1 GLUL_ORENI	P81026 oreochromis
25	84	40.4	124	1 GLUL_LOPAM	P01278 lophius ame
26	83	39.9	29	1 GLUC_CHIBR	P31297 chinchilla
27	82	39.4	29	1 GLUC_RABIT	P25449 oryctolagus
28	82	39.4	69	1 GLUC_CANFA	P29794 canis faml
29	79	38.0	33	1 GLU2_ORENI	P81027 oreochromis
30	77	37.0	29	1 GLUC_DIDMA	P18108 didelphis m
31	76	36.5	29	1 GLUC_ANAPL	P01276 anas platyr
32	76	36.5	29	1 GLUC_CALMI	P13189 callorhynch
33	76	36.5	75	1 GLUC_AMICA	P33528 amia calva

34	75	36.1	29	1	GLUC_LAMFL	Q9prq9 lampetra fl
35	73	35.1	36	1	GLUC_HYDCO	P09682 hydrolagus
36	67	32.2	38	1	EXEL_HELHU	P04203 heloderma s
37	62	29.8	27	1	SECR_CANFA	P09910 canis faml
38	61	29.3	131	1	SECR_PIG	P01279 sus scrofa
39	61	29.3	170	1	VIP_HUMAN	P01282 homo sapien
40	60.5	29.1	1590	1	GCN2_YEAST	P15442 saccharomyc
41	60	28.8	121	1	SECR_HUMAN	P09683 homo sapien
42	60	28.8	134	1	SECR_RAT	P11384 rattus norv
43	59	28.4	27	1	SECR_SHEEP	P31299 ovis aries
44	59	28.4	72	1	VIP_CAVPO	P04566 cavia porce
45	59	28.4	170	1	VIP_RAT	P01283 rattus norv

ALIGNMENTS

RESULT 1
EXE3_HELHO
ID EXE3_HELHO STANDARD; PRT; 39 AA.
AC P20394; 1991 (Rel. 17, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Exendin-3.
OS Heloderma horridum (Mexican beaded lizard).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Lepidosauria; Squamata; Scleroglossa; Anguilliformia; Helodermatidae;
OC Heloderma.
OX NCBI_TaxID=8552;
RN [1]
RP SEQUENCE.
RC TISSUE=Venom;
RX MEDLINE=91056067; PubMed=1700785;
RA Eng J., Andrew P.C., Kleinman W.A., Singh L., Raufman J.-P.;
RT "Purification and structure of exendin-3, a new pancreatic
secretagogue isolated from Heloderma horridum venom.";
RL J. Biol. Chem. 265:20259-20262(1990).
CC -!- FUNCTION: HAS A VIP/SECRETIN-LIKE BIOLOGICAL ACTIVITY. INTERACTS
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Produced by the venomous gland.
CC -!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
DR PIR: A23674; HG33.
DR HSP; P01275; 1380.
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; Hormone; 1.
DR SMART: SM00070; GLUCA; 1.
DR PROSITE: PS00260; GLUCAGON; 1.
KW Glucagon family; Toxin; Amidation.
FT MOD_RES 39
SQ SEQUENCE 39 AA: 4204 MW; AA4251D3A4B1D1B9 CRC64;

Query Match 100.0%; Score 208; DB 1; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.9e-20;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSDGFTSLSKQMEAEVRLFIWLKNGGSSGAPPPS 39
|||||
Db 1 HSDGFTSLSKQMEAEVRLFIWLKNGGSSGAPPPS 39

RESULT 2
EXE4_HELHU
ID EXE4_HELHU STANDARD; PRT; 87 AA.
AC P26349;
DT 01-MAY-1992 (Rel. 22, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Exendin-4 precursor.
OS Heloderma suspectum (Gila monster).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Lepidosauria; Squamata; Scleroglossa; Anguilliformia; Helodermatidae;

OC Heloderma.
 OX NCBI_TaxID=8554;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97172477; PubMed=9020121;
 RA Chen Y.E., Drucker D.J.;
 RT "Tissue-specific expression of unique mRNAs that encode proglucagon-
 RT derived peptides or exendin 4 in the lizard.";
 RL J. Biol. Chem. 272:4108-4115(1997).
 RN [2]
 RP SEQUENCE OF 48-86.
 RC TISSUE=venom;
 RA MEDLINE=92218391; PubMed=1313797;
 RA Eng J., Kleinman W.A., Singh L., Singh G., Kaufman J.-P.;
 RT "Isolation and characterization of exendin-4, an exendin-3 analogue,
 RT from Heloderma suspectum venom. Further evidence for an exendin
 RT receptor on dispersed acini from guinea pig pancreas.";
 RL J. Biol. Chem. 267:7402-7405(1992).
 CC -1- FUNCTION: HAS A VIP/SECRETIN-LIKE BIOLOGICAL ACTIVITY. INTERACTS
 CC WITH THE EXENDIN RECEPTOR.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Produced by the venomous gland.
 CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
 CC -----
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 CC or send an email to license@sib-sib.ch).
 CC -----
 DR EMBL; U77613; AAB51130.1; -
 DR PIR; A42486; HMGH4G.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF00123; hormone2; 2.
 DR SMART; SM00070; GLUCA; 1.
 DR PROSITE; PS00260; GLUCAGON; 1.
 KW Glucagon family; Toxin; Amidation; Signal.
 FT SIGNAL 1 23 POTENTIAL.
 FT PEPTIDE 48 86 EXENDIN-4.
 FT MOD_RES 86 86
 SQ SEQUENCE 87 AA; 9479 MW; 656BA6E3D87454A2 CRC64;
 Query Match 96.2%; Score 200; DB 1; Length 87;
 Best Local Similarity 94.9%; Pred. No. 5.1e-19;
 Matches 37; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 HSDGFTSDLSKOMEAEAVRLFIEWLKNKGPPSS 39
 DB 48 HSGGFTSDLSKOMEAEAVRLFIEWLKNKGPPSS 86
 RESULT 3
 ID GLUC_IGTPU STANDARD; PRT; 71 AA.
 AC P04093;
 DT 01-NOV-1986 (Rel. 03, Created)
 DT 01-MAR-1989 (Rel. 10, Last sequence update)
 DT 01-NOV-1990 (Rel. 16, Last annotation update)
 DE Glucagon precursor (Fragment).
 OS Ictalurus punctatus (Channel catfish).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Siluriformes;
 OC Ictaluridae; Ictalurus.
 OX NCBI_TaxID=7998;
 RN [1]
 RP SEQUENCE.
 RC TISSUE=pancreas;
 RA MEDLINE=87156787; PubMed=3030323;
 RA Hoeslin N.M., Mahrenholz A.M., Andrews P.C., Gurd R.S.;
 RT "Biological activities of catfish glucagon and glucagon-like
 RT peptide.";

RL Biochem. Biophys. Res. Commun. 143:87-92(1987).
 RN [2]
 RP SEQUENCE.
 RC TISSUE=Pancreas;
 RX MEDLINE=85157536; PubMed=3838546;
 RA Andrews P.C., Ronner P.;
 RT "Isolation and structures of glucagon and glucagon-like peptide from
 RT catfish pancreas.";
 RL J. Biol. Chem. 260:3910-3914(1985).
 CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
 CC THE BLOOD SUGAR LEVEL.
 CC -1- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
 CC IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
 CC -1- MISCELLANEOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH
 CC AMERICAN GOOSEFISH SEQUENCES.
 CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
 DR PIR; A05166; GICDN.
 DR HSSP; P01274; IGCN.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF00123; hormone2; 2.
 DR SMART; SM00070; GLUCA; 2.
 DR PROSITE; PS00260; GLUCAGON; 2.
 KW Glucagon family; Hormone.
 FT NON_TER 1 1
 FT PEPTIDE 1 29 GLUCAGON.
 FT PEPTIDE 38 71 GLUCAGON-LIKE PEPTIDE.
 FT CONFLICT 53 53 E -> D (IN REF. 2).
 FT NON_TER 71 71
 SQ SEQUENCE 71 AA; 8173 MW; 24688E79AD981A8F CRC64;
 Query Match 49.0%; Score 102; DB 1; Length 71;
 Best Local Similarity 54.8%; Pred. No. 1.6e-06;
 Matches 17; Conservative 8; Mismatches 6; Indels 0; Gaps 0;
 QY 1 HSDGFTSDLSKOMEAEAVRLFIEWLKNKGPP 31
 DB 38 HADGTYSDVSSVLEQAAKDFITWLKSGQP 68
 RESULT 4
 ID GLUC_RANCA STANDARD; PRT; 103 AA.
 AC P15438; P15439; P15440;
 DT 01-APR-1990 (Rel. 14, Created)
 DT 01-JUL-1993 (Rel. 26, Last sequence update)
 DT 01-JUL-1993 (Rel. 26, Last annotation update)
 DE Glucagon precursor (Fragments).
 OS Rana catesbeiana (Bull frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Neobatrachia; Ranioidea; Ranidae; Rana.
 OX NCBI_TaxID=8400;
 RN [1]
 RP SEQUENCE.
 RC TISSUE=Pancreas;
 RX MEDLINE=88257102; PubMed=3260236;
 RA Pollock H.G., Hamilton J.W., Rouse J.B., Ebner K.E., Rawitch A.B.;
 RT "Isolation of peptide hormones from the pancreas of the bullfrog
 RT (Rana catesbeiana). Amino acid sequences of pancreatic polypeptide,
 RT oxyntomodulin, and two glucagon-like peptides.";
 RL J. Biol. Chem. 263:9746-9751(1988).
 CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
 CC THE BLOOD SUGAR LEVEL.
 CC -1- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
 CC IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
 CC -1- MISCELLANEOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH
 CC OTHER SPECIES SEQUENCES.
 CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
 DR PIR; B28091; GCFGB.
 DR HSSP; P01274; IGCN.
 DR InterPro; IPR000532; Glucagon.
 DR PRINTS; PR00275; GLUCAGON.
 DR SMART; SM00070; GLUCA; 3.
 DR PROSITE; PS00260; GLUCAGON; 3.

RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
CC THE BLOOD SUGAR LEVEL.
CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
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CC
CC EMBL: U65528; AAB39563.1; -
DR HSP: P01274; IGCN.
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; hormone2; 2.
DR PRINTS: PR00275; GLUCAGON.
DR SMART: SM00070; GLUCA; 2.
DR PROSITE: PS00260; GLUCAGON; 2.
KW Glucagon family; Hormone; Cleavage on pair of basic residues; Signal.
FT SIGNAL 1 21 POTENTIAL.
FT PEPTIDE 22 47 GLICENTIN-RELATED POLYPEPTIDE.
FT PEPTIDE 50 78 GLUCAGON.
FT PROPEP 80 85
FT PEPTIDE 88 121 GLUCAGON-LIKE PEPTIDE.
SQ SEQUENCE 121 AA; 13527 MW; 5C1D4BEC1D26B9C6 CRC64;

Query Match 43.8%; Score 91; DB 1; Length 121;
Best Local Similarity 45.2%; Pred. No. 7.6e-05;
Matches 14; Conservative 10; Mismatches 7; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEAEAVRLFIEWLKGKGP 31
DB 88 HAEGTYSDFSLKQDAQNFVAWLKSGQP 118

RESULT 8
GLU2_LOPAM
ID GLU2_LOPAM STANDARD; PRT; 122 AA.
AC P04032; (Rel. 03, Created)
DT 01-NOV-1986 (Rel. 03, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Glucagon II precursor [Contains: Glucicentin-related polypeptide (GRPP);
Glucagon II; Glucagon-like peptide II].
OS Lophius americanus (American goosfish) (Anglerfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Paracanthopterygii; Lophiiformes; Lophiidae; Lophius.
OX NCBI_TaxID=8073;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=83135785; PubMed=6338015;
RA Lund P.K., Goodman R.H., Montminy M.R., Dee P.C., Habener J.F.;
RT "Anglerfish islet pre-proglucagon II. Nucleotide and corresponding
RT amino acid sequence of the cDNA".
EL J. Biol. Chem. 258:3280-3284(1983).
RN [2]
RP PROCESSING.
RX MEDLINE=86286913; PubMed=3526301;
RA Noe B.D., Andrews P.C.;
RT "Specific glucagon-related peptides isolated from anglerfish islets
RT are metabolic cleavage products of (pre)proglucagon-II.";
RL Peptides 7:331-339(1986).
CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
CC THE BLOOD SUGAR LEVEL.
CC -1- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
CC IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
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CC
CC EMBL: V00632; CAA23905.1; -
DR PIR: A05150; GCAF2.
DR HSP: P01274; IGCN.
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; hormone2; 2.
DR PRINTS: PR00275; GLUCAGON.
DR SMART: SM00070; GLUCA; 2.
DR PROSITE: PS00260; GLUCAGON; 2.
KW Glucagon family; Hormone; Cleavage on pair of basic residues; Signal.
FT SIGNAL 1 21
FT PEPTIDE 22 49 GLICENTIN-RELATED POLYPEPTIDE.
FT PEPTIDE 52 80 GLUCAGON II.
FT PROPEP 83 86
FT PEPTIDE 89 119 GLUCAGON-LIKE PEPTIDE II.
SQ SEQUENCE 122 AA; 14171 MW; 5140AC47EF915519 CRC64;

Query Match 43.8%; Score 91; DB 1; Length 122;
Best Local Similarity 48.3%; Pred. No. 7.7e-05;
Matches 14; Conservative 9; Mismatches 6; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEAEAVRLFIEWLKGK 29
DB 89 HADGTYTSDVSSYLQDAQKDFVSNLKG 117

RESULT 9
GLU1_ANGAN
ID GLU1_ANGAN STANDARD; PRT; 30 AA.
AC P41521;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 01-NOV-1995 (Rel. 32, Last annotation update)
DE Glucagon-like peptide (GLP), freshwater eel, and
OS Anguilla anguilla (European eel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
OC Anguilla.
OX NCBI_TaxID=7936, 7938;
RN [1]
RP SEQUENCE.
RX TISSUE=Pancreas;
RX MEDLINE=91340068; PubMed=1874385;
RA Conlon J.M., Andrews P.C., Thim L., Moon T.W.;
RT "The primary structure of glucagon-like peptide but not insulin has
RT been conserved between the American eel, Anguilla rostrata and the
RT European eel, Anguilla anguilla".
EL Gen. Comp. Endocrinol. 82:23-32(1991).
CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
DR PIR: B01125; B01125.
DR PIR: C61125; C61125.
DR HSP: P01275; LBHO.
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; hormone2; 1.
DR PRINTS: PR00275; GLUCAGON.
DR SMART: SM00070; GLUCA; 1.
DR PROSITE: PS00260; GLUCAGON; 1.
KW Glucagon family; Amidation.
FT MOD_RES 30 30
SQ SEQUENCE 30 AA; 3376 MW; 592DA5EABD6E49D0 CRC64;

Query Match 43.3%; Score 90; DB 1; Length 30;
Best Local Similarity 44.8%; Pred. No. 2.1e-05;
Matches 13; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

QY 1 HSDGTFSDLSKQMEAEAVRLFIEWLKGK 29
DB 89 HADGTYTSDVSSYLQDAQKDFVSNLKG 117

```

Db 1 HAEGTYSVSYLQDQAAKEFVSWLKTG 29
RESULT 10
GLUC_SCYCA STANDARD; PRT; 29 AA.
AC P09687;
DT 04-MAR-1989 (Rel. 10, Created)
DT 04-MAR-1989 (Rel. 10, Last sequence update)
DT 01-JAN-1990 (Rel. 13, Last annotation update)
DE Glucagon.
OS Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC Elasmobranchii; Galeomorphii; Galeoidea; Carchariniiformes;
OC Scyliorhinidae; Scyliorhinus.
OX NCBI_TaxID=7830;
RN [1]
SEQUENCE.
RP TISSUE-Pancreas;
RX MEDLINE=87190953; PubMed=3569517;
RA Conlon J.M., O'Toole L., Thim L.;
RT "Primary structure of glucagon from the gut of the common dogfish
  (Scyliorhinus canicula).";
RL FEBS Lett. 214:50-56(1987).
CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
  THE BLOOD SUGAR LEVEL.
CC -1- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
  IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
DR PIR: A26992; GCDP.
DR HSSP: P01274; IGCN.
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; hormone2; 1.
DR PRINTS: PR00275; GLUCAGON.
DR SMART: SM00070; GLUCA; 1.
DR PROSITE: PS00260; GLUCAGON; 1.
KW Glucagon family; Hormone.
SQ SEQUENCE 29 AA; 3529 MW; 6FA96392086F0226 CRC64;

Query Match 42.3%; Score 88; DB 1; Length 29;
Best Local Similarity 53.6%; Pred. No. 3.6e-05;
Matches 15; Conservative 5; Mismatches 8; Indels 0; Gaps 0;

QY 1 HSDGFTSDLSKOMEAEAVRLFIEWLKN 28
DB 1 HSEGTFTSDYSKYMNRRAKDFVQWLMN 28

RESULT 11
GLUC_ONCKI STANDARD; PRT; 68 AA.
AC P07449;
DT 01-APR-1988 (Rel. 07, Created)
DT 01-APR-1988 (Rel. 07, Last sequence update)
DT 01-NOV-1990 (Rel. 16, Last annotation update)
DE Glucagon precursor (Fragment).
OS Oncorhynchus kisutch (Coho salmon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX NCBI_TaxID=8019;
RN [1]
SEQUENCE.
RP MEDLINE=86234328; PubMed=3520699;
RA Pilsetskaya E., Pollock H.G., Rouse J.B., Hamilton J.W., Kimmel J.R.,
  Gorman A.;
RT "Isolation and structures of coho salmon (Oncorhynchus kisutch)
  glucagon and glucagon-like peptide.";
RL Regul. Pept. 14:57-67(1986).
CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
  THE BLOOD SUGAR LEVEL.
CC -1- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
  IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

Db 1 HAEGTYSVSYLQDQAAKEFVSWLKTG 29
RESULT 12
GLUC_CHICK STANDARD; PRT; 151 AA.
AC P01277;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-AUG-1990 (Rel. 15, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Glucagon precursor.
OS Gallus gallus (Chicken), and
OS Meleagris gallopavo (Common turkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031, 9103;
RN [1]
SEQUENCE FROM N.A.
RP SPECIES-Chicken; TISSUE-Pancreas;
RX MEDLINE=90249492; PubMed=2338135;
RA Hasegawa S., Terazono K., Nata K., Takada T., Yamamoto H.,
  Okamoto H.;
RT "Nucleotide sequence determination of chicken glucagon precursor
  cDNA. Chicken preproglucagon does not contain glucagon-like peptide
  II.";
RL FEBS Lett. 264:117-120(1990).
RN [2]
SEQUENCE OF 55-83.
RP SPECIES-Chicken;
RX MEDLINE=76069271; PubMed=1194290;
RA Pollock H.G., Kimmel J.R.;
RT "Chicken glucagon. Isolation and amino acid sequence studies.";
RL J. Biol. Chem. 250:9377-9380(1975).
RN [3]
COMPOSITION, AND SEQUENCE OF 55-83.
RP SPECIES-M.gallopavo;
RX MEDLINE=73074118; PubMed=4645932;
RA Markussen J., Frandsen E.K., Hedding L.G., Sundby F.;
RT "Turkey glucagon: crystallization, amino acid composition and
  immunology.";
RL Horm. Metab. Res. 4:360-363(1972).
CC -1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
  THE BLOOD SUGAR LEVEL.
CC -1- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
  IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
CC -1- MISCELLANEOUS: THE COMPOSITION OF TURKEY GLUCAGON APPEARS TO BE
  IDENTICAL WITH CHICKEN.
CC -1- MISCELLANEOUS: CHICKEN PREPROGLUCAGON DOES NOT CONTAIN".

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CC      IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
CC      -!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
CC      PIR: S09348; GCFLE.
CC      PIR: A61135; A61135.
CC      HSSP; P01274; IGCN.
CC      InterPro; IPR00532; Glucagon.
CC      Pfam; PF00123; hormone2; 1.
CC      PRINTS; PR00275; GLUCAGON.
CC      SMART; SM00070; GLUC; 1.
CC      PROSITE; PS00260; GLUCAGON; 1.
CC      Glucagon family; Hormone.
CC      SKW SEQUENCE 29 AA; 3508 MW; 77D594320866252 CRC64;

Query Match      40.9%; Score 85; DB 1; Length 29;
Best Local Similarity 50.0%; Pred. No. 8.8e-05;
Matches 14; Conservative 7; Mismatches 7; Indels 0; Gaps

QY      1 HSDGTFSDLSKOMEAEAVRLFIEWLKN 28
          ||:|||||: || :| :| :|:|||||
DB      1 HSEGTFTSDYSKYLETTRRAQDFVQWLKN 28

RESULT 14
GLUC_TORMA      STANDARD;      PRT;      29 AA.
AC      AC P09567;
DT      01-MAR-1989 (Rel. 10, Created)
DT      01-MAR-1989 (Rel. 10, Last sequence update)
DT      01-MAR-1989 (Rel. 10, Last annotation update)
DE      Glucagon.
OS      Torpedo marmorata (Marbled electric ray).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC      Elasmobranchii; Squalea; Hyposqualea; Pristiogryla; Batoidea;
OC      Torpediniformes; Torpedinidae; Torpedinidae; Torpedo.
ON      NCBI_Taxid=17788;
OX      [1]
RR      RNC
RP      TISSUE=Pancreas;
RX      MEDLINE=86083105; Pubmed=4076759;
RC      Conlon J.M., Thim L.;
RT      "Primary structure of glucagon from an elasmobranchian fish. Torpedo
      marmorata."
RL      Gen. Comp. Endocrinol. 60:398-405(1985).
CC      -!- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
      THE BLOOD SUGAR LEVEL.
CC      -!- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
      IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
CC      -!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
CC      PIR; S07211; S07211.
CC      HSSP; P01274; IGCN.
CC      InterPro; IPR000532; Glucagon.
CC      Pfam; PF00123; hormone2; 1.
CC      PRINTS; PR00275; GLUCAGON.
CC      SMART; SM00070; GLUC; 1.
CC      PROSITE; PS00260; GLUCAGON; 1.
CC      Glucagon family; Hormone.
CC      SKW SEQUENCE 29 AA; 3511 MW; 04D96392086F0227 CRC64;

Query Match      40.9%; Score 85; DB 1; Length 29;
Best Local Similarity 50.0%; Pred. No. 8.8e-05;
Matches 14; Conservative 6; Mismatches 8; Indels 0; Gaps

QY      1 HSDGTFSDLSKOMEAEAVRLFIEWLKN 28
          ||:|||||: || :| :| :|:|||||
DB      1 HSEGTFTSDYSKYLDNRRAKDFVQWLKN 28

RESULT 15
GLUC_MYOSC      STANDARD;      PRT;      96 AA.
AC      AC P09666;
DT      01-MAR-1989 (Rel. 10, Created)
DT      01-MAR-1989 (Rel. 10, Last sequence update)

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GenCore version 5.1.4.p5.4578
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OM protein - protein search, using sw model

Run on 28 March 28, 2003, 08:33:48 ; Search time 85 seconds
(without alignments)
94.539 Million cell updates/sec

Title: US-09-756-690A-1

Perfect score: 208

Sequence: 1 HSDGTFSLSKQEEAVRLFIWLNKGSPGAPPPS 39

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- 1: sp_archaea:*
- 2: sp_bacteria:*
- 3: sp_fungi:*
- 4: sp_human:*
- 5: sp_invertebrate:*
- 6: sp_mammal:*
- 7: sp_mhc:*
- 8: sp_organelle:*
- 9: sp_plant:*
- 10: sp_rodent:*
- 11: sp_virus:*
- 12: sp_vertebrate:*
- 13: sp_unclassified:*
- 14: sp_rviro:*
- 15: sp_bacteriaph:*
- 16: sp_bacteriaph:*
- 17: sp_bacteriaph:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	117	56.2	266	13	042143
2	109	52.4	219	13	042144
3	99	47.6	220	13	080WL9
4	93	44.7	178	13	091409
5	93	44.7	178	13	091971
6	93	44.7	178	13	091189
7	87.5	42.1	62	13	09PRW9
8	87.5	42.1	160	13	09PUR1
9	87	41.8	204	13	012956
10	86	41.3	206	13	091410
11	85	40.9	180	6	095LGO
12	83	39.9	120	13	09PUR0
13	83	39.9	121	13	09DDE6
14	79	38.0	96	13	09DG43
15	62	29.8	347	16	092XW3
16	61	29.3	193	5	09V712

17	57.5	27.6	239	3	Q9USQ8
18	57.5	27.6	558	10	08S3P9
19	57	27.4	614	16	09K5S1
20	56.5	27.2	200	2	0936E2
21	56.5	27.2	298	2	09AL20
22	56.5	27.2	298	2	09XD90
23	56.5	27.2	608	10	022678
24	56	26.9	171	11	Q9D227
25	56	26.9	652	10	09M4E7
26	56	26.9	991	10	08VZG7
27	56	26.9	1051	10	08LX25
28	56	26.9	2127	12	087294
29	56	26.9	2127	12	087294
30	55.5	26.7	660	10	Q9LR67
31	55.5	26.7	1272	13	Q90924
32	55.5	26.7	1369	13	042414
33	55	26.4	188	2	Q49387
34	55	26.4	192	2	Q49390
35	55	26.4	790	5	Q20949
36	54.5	26.2	132	10	08XID9
37	54.5	26.2	132	10	08XCL1
38	54.5	26.2	379	2	08S863
39	54.5	26.2	491	5	Q8T0N0
40	54.5	26.2	610	5	Q9W4Z5
41	54.5	26.2	913	5	Q8T2W6
42	54.5	26.2	1545	16	Q9RQD1
43	54	26.0	132	7	Q95HK0
44	54	26.0	309	5	002163
45	54	26.0	310	17	Q9YE06

ALIGNMENTS

RESULT 1

042143	PRELIMINARY;	PRT;	266 AA.
ID	042143		
AC	042143		
DT	01-JAN-1998	(TRENBLREL. 05, Created)	
DT	01-JAN-1998	(TRENBLREL. 05, Last sequence update)	
DE	Glucagon I precursor [Contains: Glucagon; glucagon-like peptide 1A (GLP-1A); glucagon-like peptide 1B (GLP-1B); glucagon-like peptide 1C (GLP-1C); glucagon-like peptide 2 (GLP-2)].		
DE	Xenopus laevis (African clawed frog).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae;		
OC	Xenopodidae; Xenopus.		
OX	NCBI_TaxID=8355;		
RN	[1]		
RP	SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING.		
RC	TISSUE=PANCREAS;		
RX	MEDLINE=97368292; PubMed=923287;		
RA	Irwin D.M., Satkunarajah M., Wen Y., Brubaker P.L., Pederson R.A., Wheeler M.B.;		
RT	"The Xenopus proglucagon gene encodes novel GLP-1-like peptides with insulinotropic properties."		
RL	Proc. Natl. Acad. Sci. U.S.A. 94:7915-7920(1997).		
CC	- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOCEN AND LIPIDS, AND RAISES THE BLOOD SUGAR LEVEL.		
CC	- ALTERNATIVE PRODUCTS: 2 ISOFORMS; 1 (SHOWN HERE) AND 2; ARE PRODUCED BY ALTERNATIVE SPLICING.		
CC	- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.		
DR	EMBL; AF004432; AAB65660.1; -		
DR	HSSP; P01274; 1GCM.		
DR	InterPro; IPR000532; Glucagon.		
DR	Pfam; PF00123; hormone2; 5.		
DR	PRINTS; PR00275; GLUCAGON.		
DR	SMART; SM00070; GLUCA; 5.		
DR	PROSITE; PS00260; GLUCAGON; 5.		
KW	Glucagon family; Hormone; Signal; Cleavage on pair of basic residues;		
KW	Multigene family; Alternative splicing.		
FT	SIGNAL		

01-MAR-2002 (TRENBLrel. 20, Created)
01-MAR-2002 (TRENBLrel. 20, Last sequence update)
01-JUN-2002 (TRENBLrel. 21, Last annotation update)
DE Proglucagon.
OS Hoplobatrachus rugulosus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae;
OC Hoplobatrachus.
OX NCBI_TaxID=110072;
[1]
RN SEQUENCE FROM N.A.
RA Yeung C.-M., Chow B.K.C.;
RA "Identification of a proglucagon cDNA from Rana tigrina rugulosa that
RT encodes two GLP-1s.";
RT Gen. Comp. Endocrinol. 124:0-0(2001).
RL EMBL: AF324209; AAL35758.1; -
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; hormone2; 4.
DR PRINTS: PR00275; GLUCAGON.
DR SMART: SM00070; GLUCA; 4.
DR PROSITE: PS00260; GLUCAGON; UNKNOWN_4.
DR SEQUENCE 220 AA; 25615 MW; C72D926E7F89E381 CRC64;

Query Match 47.6%; Score 99; DB 13; Length 220;
Best Local Similarity 44.3%; Pred. No. 3.1e-05;
Matches 16; Conservative 9; Mismatches 11; Indels 0; Gaps 0;

QY 1 HSDGFTTSDLSKQMEEEAVRLFIEWLKNKGPPSSGAP 36
DB 135 HAEGTFTSDMTSYLEEKAKEEVDWLKGRKRNFP 170

RESULT 4
QY1409 PRELIMINARY; PRT; 72 AA.
AC QY1409; Q91232;
AT 01-NOV-1996 (TRENBLrel. 01, Created)
DT 01-NOV-1996 (TRENBLrel. 01, Last sequence update)
DT 01-DEC-2001 (TRENBLrel. 19, Last annotation update)
DE PROGLUCAGON (Fragment).
OS Oncorhynchus tshawytscha (Chinook salmon) (King salmon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Procanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX NCBI_TaxID=74940;
[1]
RN SEQUENCE FROM N.A.
RP MEDLINE-95295739; PubMed-7776976;
RX Irwin D.M., Wong J.;
RA "Trout and chicken proglucagon: alternative splicing generates mRNA
RT transcripts encoding glucagon-like peptide 2.";
RT Mol. Endocrinol. 9:267-277(1995).
RL EMBL: S78474; AAD14283.1; -
DR EMBL: U19920; AAC59670.1; -
DR HSP: P01274; IGCN.
DR InterPro: IPR000532; Glucagon.
DR Pfam: PF00123; hormone2; 2.
DR PRINTS: PR00275; GLUCAGON.
DR SMART: SM00070; GLUCA; 2.
DR PROSITE: PS00260; GLUCAGON; UNKNOWN_1.
FT NON_TER 1
SQ SEQUENCE 72 AA; 8293 MW; 8584352B1C260A31 CRC64;

Query Match 44.7%; Score 93; DB 13; Length 72;
Best Local Similarity 48.3%; Pred. No. 5.7e-05;
Matches 14; Conservative 10; Mismatches 5; Indels 0; Gaps 0;

QY 1 HSDGFTTSDLSKQMEEEAVRLFIEWLKNKG 29
39 HADGNTSDVSTYLODAAKDFSWLKSG 67

RESULT 9

RESULT 14

Q9DG43 Q9DG43 PRELIMINARY; PRT; 96 AA.
AC Q9DG43; 2001 (TRENBLrel. 16, Created)
DT 01-MAR-2001 (TRENBLrel. 16, Last sequence update)
DT 01-DEC-2001 (TRENBLrel. 19, Last annotation update)
DE Proglucagon (Fragment).
OS Ambloplites rupestris.
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Telostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidae;
OC Centrarchidae; Ambloplites.
OX NCBI_TaxID=109273;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Rock Bass Proglucagon."
RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF190499; AAG16778.1; -.
DR HSSP; P01274; 1GCN.
DR InterPro; IPR000532; Glucagon.
DR Pfam; PF00123; hormone2; 2.
DR PRINTS; PR00275; GLUCAGON.
DR SMART; SM00070; GLUCA; 2.
DR PROSITE; PS00260; GLUCAGON; UNKNOWN_1.
FT NON_TER 1 1
FT CHAIN 1 >29 GLUCAGON.
FT CHAIN 39 >70 GLUCAGON-LIKE PEPTIDE 1.
FT CHAIN 86 >96 GLUCAGON-LIKE PEPTIDE 2.
FT NON_TER 96 96
SQ SEQUENCE 96 AA; 11225 MW; 6435033EBDDC00CE CRC64;

Query Match 38.0%; Score 79; DB 13; Length 96;

Best Local Similarity 42.9%; Pred. No. 0.0059;

Matches 15; Conservative 5; Mismatches 15; Indels 0; Gaps 0;

OY 1 HSDGFTSLSKQEEAVRLFIEWLKNGPSSGA 35
||| ||||| : : : : : ||| | | |
DB 1 HSQGTFTNDYTNLEDRQAQDFIRWLMNKRSGAA 35

RESULT 15

Q92XW3 Q92XW3 PRELIMINARY; PRT; 347 AA.
AC Q92XW3;
DT 01-DEC-2001 (TRENBLrel. 19, Created)
DT 01-DEC-2001 (TRENBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TRENBLrel. 20, Last annotation update)
DE Hypothetical protein RAL127.
GN RAL127 OR SMA2063.
OS Rhizobium meliloti (Sinorhizobium meliloti).
OC Plasmid pSyma (megaplasmid 1).
OC Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
OC Rhizobiaceae; Sinorhizobium.
OX NCBI_Taxid=382;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=1021;
RX MEDLINE=21396509; PubMed=11481432;
RA Barnett M.J., Fisher R.F., Jones T., Komp C., Abola A.P.,
RA Barloy-Hubler F., Bowser L., Capela D., Galibert F., Gouzy J.,
RA Gurjal M., Hong A., Huizar L., Hyman R.W., Kahn D., Kahn M.L.,
RA Kaiman S., Keating D.H., Palm C., Peck M.C., Surzycki R., Wells D.H.,
RA Yeh K.-C., Davis R.W., Federspiel N.A., Long S.R.;
RT "Nucleotide sequence and predicted functions of the entire
Sinorhizobium meliloti pSyma megaplasmid."
RL Proc. Natl. Acad. Sci. U.S.A. 98:9883-9888(2001).
DR EMBL; AE007298; AKG5785.1; -.
DR InterPro; IPR001005; MYB_DNA_binding.
DR PROSITE; PS00037; MYB_1; UNKNOWN_1.
KW Hypothetical protein; Plasmid; Complete proteome.
SQ SEQUENCE 347 AA; 38706 MW; 2BDEF2867AD0475C CRC64;

Query Match 29.8%; Score 62; DB 16; Length 347;
Best Local Similarity 43.3%; Pred. No. 4.9;
Matches 13; Conservative 5; Mismatches 12; Indels 0; Gaps 0;

OY 10 LSKQEEAVRLFIEWLKNGPSSGAPPPS 39
| : ||| | : ||| : ||| | |
DB 272 LOWSVSEADLLSLEWVESGGPSVSEPSRS 301

Search completed: March 28, 2003, 08:39:25
Job time : 87 secs